# DOCUMENT RESUME

ED 147 239 SO 010 502

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|---|---|
| AUTHOR | Truhan, Deborah L. |
| TITLE | Focus on Brazil: A Case Study of Development. |
| INSTITUTION | Global Development Studies Inst., Madison, N.J. |
| PUB DATE | [77] |
| NOTE | 147p.; Tables and maps on pages 5, 7, 84-86 may not reproduce clearly due to poor reproducibility of original document |
| AVAILABLE FROM | Global Development Studies Institute, P.O. Box 522, 14 Main Street, Madison, New Jersey 07940 ($3.60, paper cover) |
| EDRS PRICE | MF-$0.83 HC-$7.35 Plus Postage. |
| DESCRIPTORS | *Area Studies; *Case Studies; Comparative Education; *Concept Teaching; *Developing Nations; Discussion (Teaching Technique); *Economic Development; Foreign Countries; Geography; Global Approach; Higher Education; History; Living Standards; Political Influences; Secondary Education; Social Problems; *Social Studies Units; Technological Advancement; Unit Plan |
| IDENTIFIERS | *Brazil |

ABSTRACT

The teaching unit is designed to help senior high school and college students learn about national development in Brazil. In this case study, development is defined as advances in social well-being and economic growth. Brazil was chosen as an example of a developing nation which depends upon foreign markets, technology, and capital. The country also has social problems aggravated by a high rate of population growth and urban overcrowding. There are five major sections in the unit. Two introductory sections describe Brazil's geography and history from the precolonial era through 1964. Highlighted are social, economic, and political events which influenced contemporary Brazil. A third section examines the international economics of Brazil's development. Economic growth and supportive political changes since 1964 are analyzed. Health, nutrition, education, income distribution, and employment opportunities are discussed in section four. Section five summarizes the economic and social aspects of the Brazilian development model, and suggests possibilities for future growth. At the end of each section are questions for discussion and research, as well as annotated reading suggestions. A glossary and a selected bibliography of 59 relevant references conclude the unit. (Author/AV)

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# FOCUS ON BRAZIL

## A Case Study of Development

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SO 010 502

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# Preface

There are several ways to teach about global development. One particularly effective method is the case study approach focusing either on a single issue or on a geographical area. Several valid reasons exist for the issue approach. Certainly, such concerns as food supply, energy, modernization, the environment, poverty and trade are transnational: all societies are involved and national borders cannot insulate the impact of such global forces. Further, one can find a wealth of material on such issues, in English and suitable for classroom use. Finally, it is relatively easy to relate global issues to personal experiences: the price of gasoline at the filling station or home heating costs, the food bill from the local market, the competitive position of imported consumer goods, and the erosion of purchasing power in a family budget. Global issues are important, can be studied, and can be understood in terms of personal experience.

Issues, however, tend to de-emphasize the human situation. Measurements are apt to be huge, whether recorded in monetary values or in weights and measures, and even per capita equivalents seldom are personally meaningful. Each issue usually is studied as a discrete problem seeking its discrete solution, whether the topic is population growth, food supply or energy consumption. At times, the obvious needs to be stated: people do not live in issues. People live in societies and cultures and communities and nations. Surely their homes are affected by issues; if they were not, the issues would not be important. Yet, one's home is affected by many other things: geographical location, history, beliefs and customs, ways of governance, and relations with others.

This human aspect of global development can be approached through country studies and the complex matrix of forces which form a distinct society. Too often in the more classical study of a country, little attention is given to that country's interrelationship with other countries, except in time of war or comparable major upheaval. Yet each country constantly is influenced by events beyond its territory as well as by its internal development. None can do whatever it wishes in spendid isolation, or through the absolute decisions of political leaders. It is this dependency which identifies a global country study from the discrete histories.

In this global country study the focus is on Brazil. The reader will find it both internationally oriented and people oriented. It includes geographical and historical sections, highly significant determinants to the development of any society. The emphasis then is placed upon the more current economic and social aspects of the Brazilian society, interrelated with global forces.

The study is not designed to be judgmental from any ideological or political point of view. Rather, it is presented to help students gain an appreciation and understanding of the complexities facing a developing nation, and to avoid the sorts of simplistic answers which too often mark one society's opinion of another.

Deborah Truhan, the author, offers serious students the opportunity to explore with her the complexities of a country as it struggles with global realities, and the variety of options and restrictions which circumscribe its development. Ms. Truhan, who has an M. Ed. from the University of Pittsburgh with a graduate certificate in Latin American studies, has lived in and visited a number of Latin American countries, and is fluent in Portuguese and Spanish. She is Program Director at Global Development Studies Institute. The Institute's work involves research and program development to encourage the teaching of global studies in schools and colleges.

Wilmer H. Kingsford
President

Global Development
Studies Institute

# Introduction

Problems of development affect every nation on earth. These problems are subregional or regional, as well as national in many cases. The United States, a "developed" nation, has underdeveloped areas: Appalachia, Indian reservations, "inner cities," and others. Argentina, a "developing" nation, has an urbane, cosmopolitan capital city which can compare favorably with the great metropolitan centers of Europe.

In this case study, development is defined as advances in both of two interrelated fields--social well-being and economic growth. Confronting developmental problems is a very complex undertaking. Symptoms of underdevelopment cannot be ignored--large sectors of the population living at subsistence levels within a traditional economy, high rates of unemployment and underemployment, malnutrition, high rates of infant mortality, and illiteracy. At the same time, the causes of underdevelopment must be directly confronted: an economy which is not large enough or strong enough to absorb the labor force productively, to provide for the potential internal market, or to generate investment capital for development projects. Since economic growth and social improvements are so vitally interrelated, neither can be approached at the total exclusion of the other, if development is to occur.

Rather than look at development as an abstract concept, this case study focuses on Brazil. Although stronger economically than most developing nations, Brazil shares their dependence on foreign markets, technology, and capital, and, like many nations--developed and developing--is dependent on foreign sources of petroleum. The social problems which must be alleviated center around the uneven distribution of the benefits of development: unequal access to health care, educational opportunities, and productive employment. These problems, in no way unique to Brazil, exist in developed, as well as developing nations. In Brazil, they are aggravated by a high rate of population growth and a growing concentration of the population in urban areas. It is in the light of Brazilian reality that they are examined.

Ideally, a country study of development should begin by examining economic and social programs and the problems which affect development. However, a survey about Brazil, in the form of a multiple choice questionnaire, indicated the need for a different point of departure. In order to find the base line of information commonly known about Brazil, the questionnaire was administered to college-bound high school juniors and seniors enrolled in social studies courses with international emphasis in nine public and independent schools in New York and New Jersey. The questions were geographic, historic, demographic, and cultural. Correct responses chosen by 50% or more of the students were few, indicating confusion and minimal knowledge about the country. As examples, while 88% knew that coffee is a major product, 73% identified Brazil as a tropical country, and 60% placed the Amazon River correctly, less than half knew the size of the country, the population, the national language, or the form of government. This survey data was conclusive in the decision to include introductory sections on Brazil's geography and history, before focusing on the multiple issues of current development.

Following these foundation sections, the study looks at the process of development, and examines internal and external factors which influence the effectiveness of development strategies. The alternatives which are explored are those relevant to a nation which decides upon rapid industrial expansion as the economic goal of development. This is followed by a section which focuses on economic development in Brazil since the military takeover in 1964. It looks at the expanding role of government in the economy, the growing centralization of power in the executive branch, and the social and economic policies designed to support rapid industrial growth. International factors related to the process of expanding and diversifying the industrial sector and exports for the world market are also examined.

The human side of development, the next focus of this case study, examines whether an improvement in the well-being of the average Brazilian has occurred since 1964. There is a discussion of demography and demographic trends in Brazil. This is followed by three sections which examine health and nutrition, education, and employment opportunities and income distribution, in general terms and in regional and national application to Brazil.

The conclusion compares and summarizes the economic and social aspects of the Brazilian development model, and some possibilities concerning future directions are raised.

It may be that this study raises more questions than it answers. If so, the true nature of development will have emerged from its pages. Development is a series of many questions with no easy answers. It is a process of selecting some alternatives, deciding against or postponing other alternatives, and building upon the results of the past, always aware of the constant factor of change. In Brazil, many decisions have been made and some preliminary results are in. Some people have hailed the Brazilian development model as one of the most outstanding cases of economic development in the post-World War II era. Others have condemned it for ignoring the social development of millions of people who exist at a subsistence level. In this case study, the approaches to resolving some of the problems, the results, and the costs involved in the Brazilian model of development are explored.

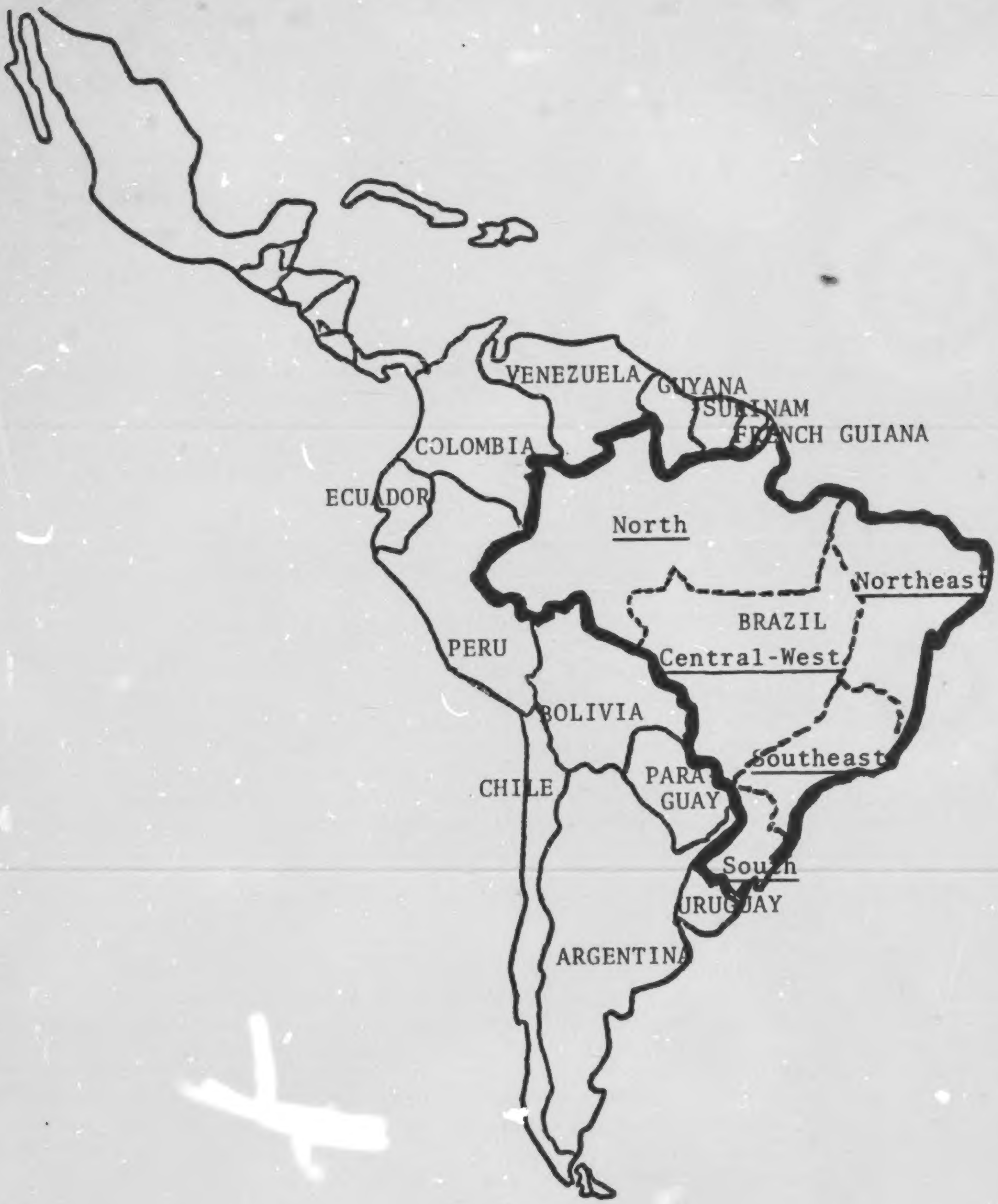
I would like to thank the readers--both global studies teachers and people knowledgeable about Brazil--for their many helpful suggestions and comments. I owe a special debt of gratitude to my coworkers--Ed Babbott, Anne Collier, Donna Hill, Bill Kingsford, Carlisle Spivey, and Walt Schaeffler--for their patience, help, and good advice as this case study slowly took form. I must, however, take total responsibility for the conclusions.

Deborah L. Truhan
Program Director

# A Geographic Introduction to Brazil

Physically, Brazil is a big nation. Slightly larger than the 48 contiguous states of the United States, Brazil is the fifth largest country in the world. Like the United States, Brazil contains a number of distinct geographic regions and sub-regions. The natural potentials and limitations of each region have in some cases encouraged settlement and, in others, discouraged it. As in the United States, climate, amount of rainfall, location of resources, topography, soil types, and other geographic variables have been perimeters for feasibility of settlement and development in Brazil. Some areas are considered "rich" and attract people and economic activities; others are "poor," remaining static and often losing population or relative economic importance. Because of this geographic complexity, examination of Brazil is usually accomplished by dividing the nation into a number of regions, the exact division often depending upon the specific purpose of the study. In this case study, the Brazilian Institute of Geography's breakdown of five regions will be used: North, Central-West, North-East, South-East, and South. Over the centuries, these various regions have developed in different manners, with the South-East emerging to dominate the nation both politically and economically.

The Brazilian interior had been explored by the end of the 17th century, but it offered little to encourage settlement in most parts. The soils were not especially fertile, as they were along the North-East coast and around São Paulo. Rumored emerald fields far in the interior were never found, although Minas Gerais, northwest of Rio de Janeiro, proved to have rich reserves of minerals. The climate, especially in the rain forest, was unappealing when compared to the coastal regions. In addition, many areas had no navigable waterways, and travel was necessarily by foot, mule, or horse. In other words, unlike the United States, there was little to attract settlers inland on any large scale. Population and economic activity, therefore, remained concentrated along the Atlantic coast, with only scattered centers of population in most of the interior.


VENEZUELA
GUYANA
SURINAM
FRENCH GUIANA
COLOMBIA
ECUADOR
North
Northeast
BRAZIL
Central-West
PERU
BOLIVIA
Southeast
CHILE
PARA GUAY
South
URUGUAY
ARGENTINA

In the 20th century, however, advances in science and technology have focused new attention on the interior. Agricultural technologies can make poor soils productive if there is a market demand for the production. The growing economic value of newly discovered minerals--uranium and bauxite, for example--have also necessitated a reevaluation of the economic potential of the interior. In addition, population pressure on the land in the traditionally inhabited areas encourages people to consider migration to the interior.

In Brazil's pursuit of guided development, the economic potential of the interior has not been ignored. Governmental planners have begun to design roads and communications systems which will allow the settlement and exploitation of previously isolated regions, taking into account how much development activities will cost and the value of that which economic development will produce. Geographic inducements and constraints have determined certain kinds of development in the past, and surely will modify plans for further development in the future.

THE NORTH

The North is a sparsely inhabited region covering 42% of Brazil's national territory and containing the Amazon basin, the largest tropical rain forest in the world. It consists of the states of Amazonas, Pará, and Acre, and the territories of Amapá, Roraima, and Rondônia. Its climate is characterized not by the extremely high temperatures which the word "tropical" evokes, but rather by monotonous temperatures averaging around 75° F and continually high humidity. Relatively steady heat and rainfall contribute to the distinct character of the rain forest--tall, straight-stemmed trees with heavy foliage at the top, cutting off the sunlight before it reaches the jungle's floor. As a result, there is little underbrush, although the ground is covered with climbing plants. The growth of jungle vegetation is very rapid, and land which has been cleared for roads, farm plots, and air strips must be defended continually against the rain forest's encroachment. Rain forest growth is also distinguished by the tremendous variety of vegetation forms found mixed together in any single area. The absence of perceptible groupings of one plant or another make the collection of jungle products a time-consuming and difficult task, as laborers must roam large areas of land to gather the species, and then carry them to a central collection site.

climate

rain forest

A seeming contradiction is that while tropical soils do produce luxurious jungle growth, they are agriculturally infertile. Continual rains change the soil both physically and chemically. Water passing through the dirt changes the physical composition by carrying down the finer particles of soil, leading to coarse soil on the surface with the finer particles eventually deposited as a layer of clay below the surface. This process is called eluviation. Leaching occurs when water carries away

tropical soils

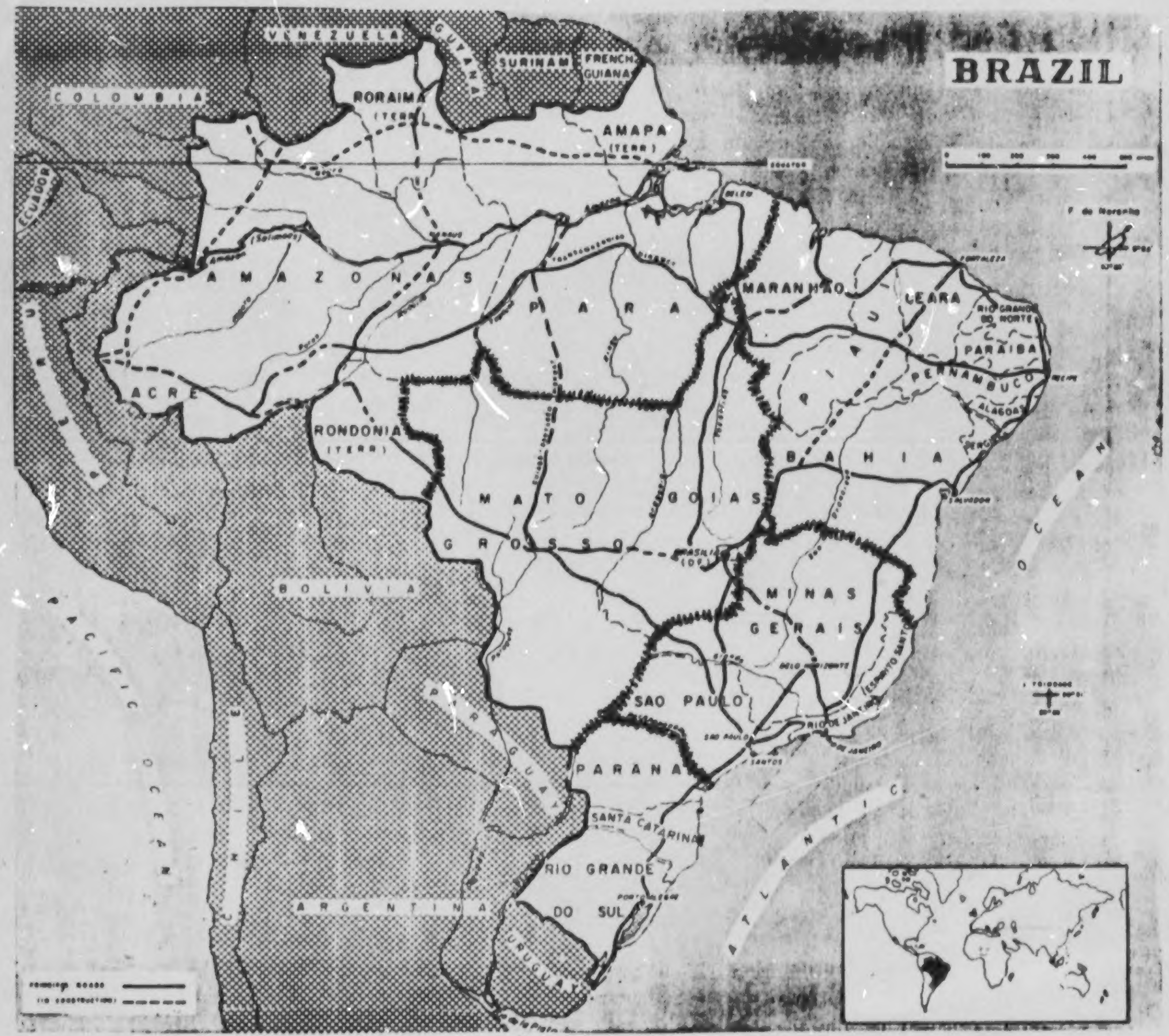
the soluble minerals, leaving behind only the more insoluble. Another chemical change, humus accumulation, occurs when organic material falls to the ground and is attacked by bacteria. This process is accelerated by constant heat and humidity. The matter rapidly decomposes, failing to accumulate in deep, fertile layers such as those found in more temperate climates. These three processes, while not hindering the growth of the deep-rooted jungle trees, make the establishment of farms for the large-scale growth of shallow-rooted food crops very difficult. In recent years, however, Japanese immigrants have successfully cultivated black pepper as a commercial crop. But in most cases, the land is cleared and used for subsistence farming for a few years. The produce grows increasingly less nourishing, and the land is soon worked out and abandoned to lie fallow. Only the flood plains--lowlands along the rivers which are seasonally covered with deposits of silt--are continually fertile.

natural resources

Some natural resources in the North are being exploited. Tropical woods, fruits, Brazil nuts, and other derivative products, such as oils, waxes, and rubber are collected, and lumbering is of growing economic importance. Large, recently discovered deposits of iron ore, manganese, and bauxite are beginning to be mined, as the necessary infrastructure is provided. These promise to bring new importance to the region. In addition, since Colombia, Ecuador, and Perú have found deposits of petroleum in their portions of the Amazon basin, the Brazilian government is supporting exploration for this important mineral, hoping to lessen the dependence on imported oil. Some of the many rivers lacing this region are potential sources of hydroelectric power, vital to many economic undertakings. Potentially, also, they could be the sites of large scale commercial fish hatcheries.

transportation

Until recently, there had been no roads crossing this area. Traditionally the Amazon River and its tributaries, navigable as far as Perú, have been the most important means of transportation in the interior, and both Belém and Manaus are important ports, even for ocean-going vessels. Over the past few decades, however, the North has been serviced by airplanes which connect many previously isolated small settlements to each other and to the exterior; many small landing fields have been cleared in the jungle. Highway construction in this region is always very difficult because of intricate topography which requires numerous causeways and bridges. A few years ago, the Trans-Amazon Highway, a 3,500 kilometer road connecting João Pessoa and Recife on the Atlantic coast of the North-East with the Peruvian border, was begun as a means of facilitating transportation of the products and minerals of the North


BRAZIL
VENEZUELA
GUYANA
SURINAM
FRENCH GUIANA
COLOMBIA
ECUADOR
PERU
RORAIMA (TERR.)
AMAPA (TERR.)
AMAZONAS
PARA
MARANHAO
CEARA
RIO GRANDE DO NORTE
PARAIBA
PERNAMBUCO
ALAGOAS
PIAUI
ACRE
RONDONIA (TERR.)
BAHIA
MATO GROSSO
GOIAS
BRASILIA (DF)
MINAS GERAIS
ESPIRITO SANTO
SAO PAULO
RIO DE JANEIRO
PARANA
SANTA CATARINA
RIO GRANDE DO SUL
BOLIVIA
PARAGUAY
ARGENTINA
URUGUAY
CHILE
PACIFIC OCEAN
ATLANTIC OCEAN

Mario Henrique Simonsen, Minister of Finance, Federative Republic of Brazil, Prospectus for External Bonds Due 1981, dated May 12, 1976, p. 8.

| Region | % National Territory | % National Population | Population Density |
|---|---|---|---|
| North | 42% | 3.9% | .95/km$^2$ |
| Central-West | 22% | 5.5% | 2.51/km$^2$ |
| North-East | 18% | 30.3% | 17.26/km$^2$ |
| South-East | 11% | 42.7% | 43.46/km$^2$ |
| South | 7% | 17.7% | 28.84/km$^2$ |

and of opening up the interior of the Amazon basin for colonization and exploration. It is to be the first direct land link with Perú. Other major routes which will help open up the interior are either under consideration or construction.

CENTRAL-WEST

The Central-West is made up of two vast states, Goiás and Mato Grosso, and the Federal District, where the capital, Brasília, is located. This region, like the North, is sparsely populated, but because of the growth of Brasília, it is attracting many more people than before.

terrain

Most of the region is located in the Central Highlands, a high plateau region which arises abruptly not far from the Atlantic coast (in the South-East and South) and slopes gently toward the north and west. In the north, it has occasional broad, rolling hills, but the south is noted for its rough terrain. It is scarred by deep valleys and gorges which have been cut by rivers passing through the region. The climate is varied, with hot, wet summers and cool, dry winters. The characteristic vegetation is a varying mixture of grass, brush, and scrub called campo cerrado. Some grass steppes can be found in the south, and the valleys along the rivers, where water is always abundant, have luxurious semi-deciduous tropical forests.

soil

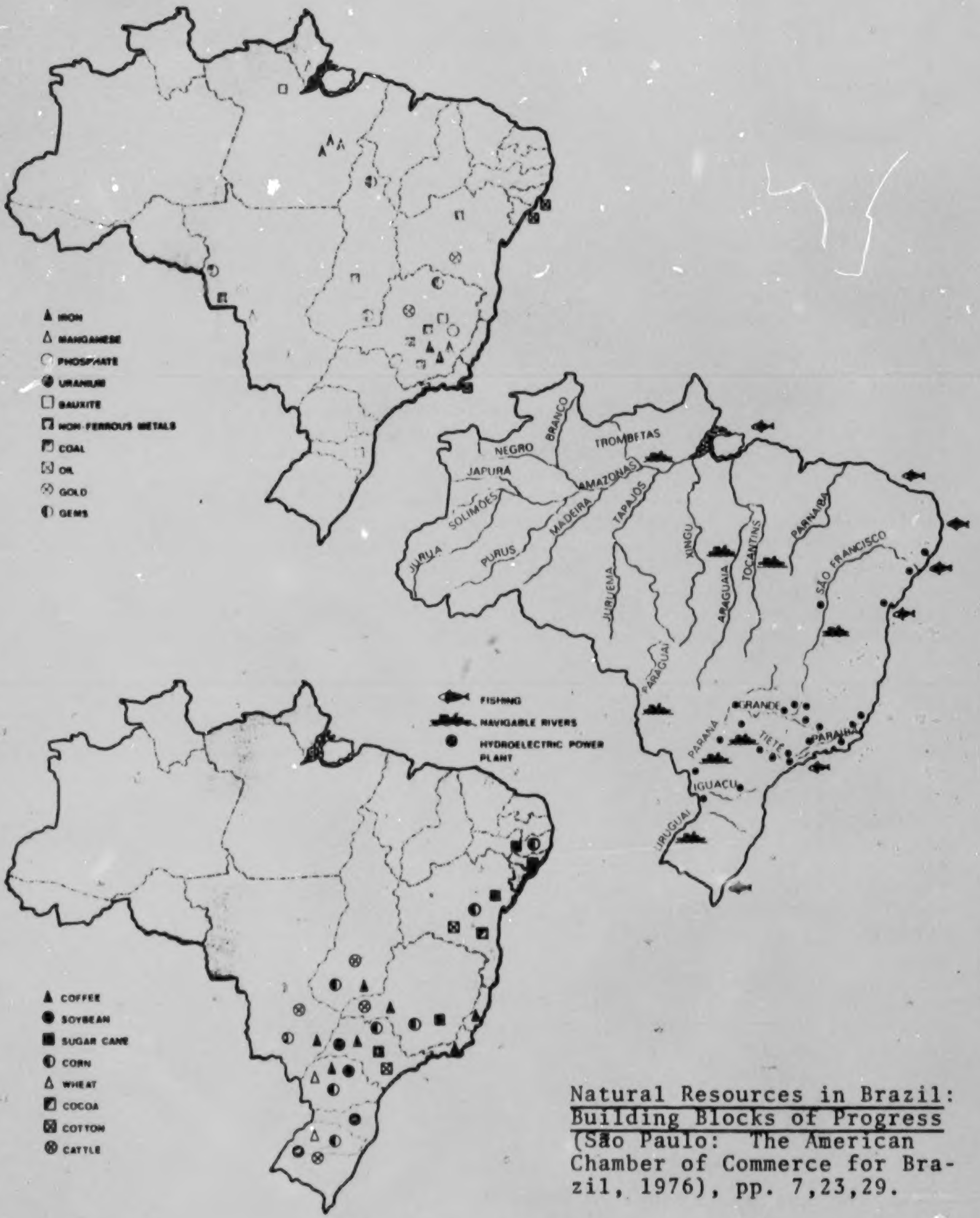
Much of the surface has been exposed for eons, and the soil is extremely poor because of thousands of years of eluviation and leaching. Most casual attempts at agriculture quickly lead to extensive erosion, and it seems that only modern, capital-intensive methods can make commercial agriculture feasible. Most of the land whose grass and scrub is useful for grazing has been divided into large cattle fazendas (ranches). For the past few decades, settlers have been moving into the basin of the Paraná River, near the Paraguayan border, and the farming of commercial crops such as coffee, rice, and beans has proved successful in this fertile region.

natural resources

Scattered mineral deposits of copper, lead, zinc and nickel are being mined. Prospectors still roam the lands in search of a strike that will make them rich, much in the manner of California's forty-niners of more than a century ago. This area is still very much a frontier region.

transportation

Because of the rough terrain, travel and transportation have always been difficult. Despite this, some all-weather roads and some important railroads cross the region. The governmental capital was relocated from Rio de Janeiro on the Atlantic coast to Brasília in 1960, as the realization of an age-old Brazilian dream to force the opening up of this part of the interior. Brasília's location has caused the construction of new highways which link the Central-West region with the other regions of the country.


IRON
MANGANESE
PHOSPHATE
URANIUM
BAUXITE
NON-FERROUS METALS
COAL
OIL
GOLD
GEMS
NEGRO
BRANCO
TROMBETAS
JAPURA
AMAZONAS
SOLIMOES
MADEIRA
TAPAJOS
PURUS
JURUA
XINGU
TOCANTINS
PARNAIBA
SAO FRANCISCO
ARAGUAIA
JURUENA
PARAGUAI
GRANDE
PARANA
TIETE
PARAIBA
IGUACU
URUGUAI
FISHING
NAVIGABLE RIVERS
HYDROELECTRIC POWER PLANT
COFFEE
SOYBEAN
SUGAR CANE
CORN
WHEAT
COCOA
COTTON
CATTLE

Natural Resources in Brazil: Building Blocks of Progress (São Paulo: The American Chamber of Commerce for Brazil, 1976), pp. 7,23,29.

NORTH-EAST

The North-East, very densely populated along the coast and less populated in the interior, contains the states of Maranhão, Piauí, Ceará, Rio Grande do Norte, Paraíba, Pernambuco, Alagoas, Sergipe, and Bahia. The region has been continuously inhabited since the early 1500's, when the first efforts to colonize Brazil began. Although classified as tropical, the area is not as uniform as the Amazon basin, and the coastal belt is quite different from the interior. The eastern coast of the region, and the area extending inland for as much as fifty miles, receives dependable seasonal rainfall, while the interior highlands and plateaus are in a dry zone of occasional rains and frequent droughts, which periodically force thousands of people to flee the area, known as the sertão.

After more than 400 years of inhabitation and agriculture, little if any of the original groundcover remains. The areas of regular rainfall and good soils have been planted, left fallow, and planted again with vast fields of sugar cane, while the dry scrublands have been cleared temporarily by slash-and-burn farmers, abandoned to cattle grazing, overgrown, and recleared for farming again and again. Four centuries ago, during Brazil's virtual monopoly of the world's sugar production, the areas around Salvador and Recife were among the wealthiest of the Western Hemisphere. Constant farming of these soils, the major resource of the region, has depleted them, while primitive farming methods of slash-and-burn and cattle grazing in the scrublands have accentuated the harm done by the alternating periods of rain and drought. Low agricultural productivity, which many people believe is due to the land-tenure problems of vast fazendas, contributes to the poverty of the North-East.

resources

Few natural resources have been found. There are some deposits of copper, sheelite, and phosphate, and a few larger deposits of oil-embedded rock, but the technology for effectively processing the rock is only now being developed. The state of Bahia has Brazil's main deposits of oil, (quite small when compared with those of major petroleum producing nations) and is the center of Brazil's petroleum industry. The region also has tropical plants whose fruits and products can be collected. Oranges are cultivated, and southern Bahia is known for cacao.

transportation

Coastal transportation was for many years carried out by boat, rather than over land. Both Recife and Salvador are important ports for international ocean trade. The São Francisco River flows northward from the state of Minas Gerais (in the South-East) and serves as a major transportation route in the interior. It is not very useful for travel after it passes through Bahia.[1] Since World War II, a number of gravel and all weather highways have been built throughout the North-East, connecting it to the richer regions to the south. The Trans-Amazon Highway is also allowing movement from the coast into the interior.

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[1] Near the western border of Alagoas state, where it veers eastward over some breaks in the highland terrain, the Paulo Alfonso Falls have been used for a major electric power plant.

SOUTH-EAST

The South-East, formed by the states of Minas Gerais, Espírito Santo, Rio de Janeiro, and São Paulo, is the most complex geographic area within Brazil. While containing less than 11% of Brazil's territory, it has a tremendous variety of vegetation, resources, and topography, and a varied climate, influenced by altitude. It is the most densely populated region containing the country's two largest cities as well as other growing urban areas and also the nation's most economically productive area, in both agriculture and industry. The "industrial triangle" is bounded by the cities of São Paulo, Rio de Janeiro, and Belo Horizonte.

climate

The thin coastal band has a tropical climate, with seasonal variations in both temperature and rainfall. The climate of the interior is cooler than the coast, because of the altitude, and drier as well. The northern part of the region is an extension of the dry scrublands of the North-East, while the portion bordering the Central-West is woodland savanna.

topography

The most striking topographical feature is the great escarpment which juts up suddenly (at times within view of the Atlantic coast) cutting off the coastal plain. Behind this is an extensive plateau with hilly uplands and low mountains which slowly level off toward the northwest.

mineral resources

The state of Minas Gerais, which means "General Mines," occupies the largest portion of this region and is worthy of its name. It has a variety of mineral deposits important to Brazil's industrialization efforts. From the area directly south and west of its capital, Belo Horizonte, begins a mountain range called the Serra do Espinhaço. This region is endowed with abundant deposits of gold, industrial diamonds, iron (one of the world's largest, purest lodes) and manganese. Minas also has smaller deposits of zirconium, chromium, molybdenum, nickel, tungsten, titanium, beryl, mica, quartz crystals, and some semi-precious gems such as aquamarine, amethyst, tourmaline, and topaz. There are scattered deposits of niobium, ilmenite, rock salt, potassium, sulphur, and bauxite.

soil

The soils of this region are varied. On the Paranã Plateau, inland from the city of São Paulo, deep, porous soil with large amounts of humus produces some of the world's best coffee. But unless cared for properly, this soil erodes quickly. In other parts of the region, where the lands have been deforested for the production of charcoal (used for cooking by a large portion of the population), erosion is also a problem. For a long time, the interior of the state of São Paulo has been the site of speculative intensive farming of commercial crops such as sugar, coffee, rice, and oranges. Small landowners also engage in mixed farming and truck farming. In this part of Brazil, the climate begins to allow the growth of some temperate climate crops such as lettuce, tomatoes, and grapes.

A number of rivers can be found in the South-East. A large hydroelectric generating station at Juiz de Fora is a major source of electricity in the region. Other rivers have the potential of being harnessed to generate electricity. West of Belo Horizonte, the São Francisco River begins its flow northward. Since the first population movements into the interior of the South-East region in the 17th century, the river has been an important transportation route, and people have settled along the valley all the way north into Bahia. The valley region is poor, used for subsistence farming and cattle grazing.

transportation

The South-East has Brazil's best transportation system, including both paved roads and railways. Travel has always been difficult because of the terrain, but winding, climbing, twisting routes to economically important centers of the region do exist, and there are also major north-south highways. However, some areas of the interior still need connections to the national transportation routes in order to be exploited. The coastal ports of Rio de Janeiro, Vitória, and Santos which serves São Paulo are important extensions of the transportation system, linking the production of the interior to the markets of the world.

SOUTH

terrain

The South, containing the states of Paraná, Santa Caterina, and Rio Grande do Sul, is another small but complex, heavily populated region. Most of its terrain is characterized by the familiar coastal plain, cut off sharply by the great escarpment, with high, rough surfaces sloping gently to the west. In the extreme south, the escarpment ends, and the flat coastal plain widens. In a number of places, rivers have cut deep valleys.

vegetation

Water is abundant, with year-round rainfall. The vegetation is varied. The coastal tropical forest gives way to a semi-deciduous forest. In the interior, the frost line is marked by the appearance of pine forests in the higher elevations, and semi-deciduous or deciduous forests in the valleys. Lumbering is an important economic activity. In the south, grass-covered prairies, excellent for grazing or wheat farming make their appearance.

resources

Small scattered mineral deposits of nickel, gold, and fleurite can be found in the South. Brazil's only large deposits of coal occur in this region, but unfortunately, it is very low grade coal with high ash and sulphur content and is usually used to make coke. However, extensive deposits of oil shale could eventually serve as an important source of petroleum for Brazil. In addition, a large hydroelectric generating station is being built at a large waterfall on the Paraná River. A binational project of Paraguay and Brazil, the Itaipú station is expected to be a principal power source for much of southern Brazil.

farming

The soil is good for many temperate climate crops, and small, family-owned farms are common throughout most of the region. This area is not as good for speculative farming of export products like coffee, sugar, or tropical fruits as is the rest of the country. Within the past few years, the growth of soybeans as a major agricultural export has brought increased economic importance to the South. In addition, the grazing lands of this area have been used to raise large herds of dairy cattle and to establish some of the best dairy farms in Brazil. The forested regions have been a source of firewood and charcoal for many years, but overuse has begun to take its toll.

transportation

In many areas, the rivers are navigable, and in the past they formed an important part of the transportation system. Now good all-weather roads reach along the coast and in to the more important cities of the interior.

SUMMARY

As seen in this geographic overview, Brazil offers a variety of resources, but they are not always in convenient locations. The historical patterns of development have produced a concentration of population and economic infrastructure in those regions which had the most valuable natural resources to be exploited, given the needs and the level of technology of the era. New technologies and new scientific discoveries have raised the prospects of the development of some previously ignored regions in the interior. Lack of infrastructure and lack of trained or skilled people for a labor force have to be overcome, in some orderly fashion, if rapid economic development of these areas is to occur. In some regions, new roads are raising the possibility of economic activities which will benefit the nation and the regional population.

## Student Activities

Locate on a map:

regions: North, Central-West, North-East, South-East, and South
states: Bahia, Minas Gerais, São Paulo, Rio Grande do Sul
cities: Belo Horizonte, Brasília, Manaus, Recife, Rio de Janeiro, Salvador, São Paulo
rivers: Amazon, São Francisco, Paraná
great escarpment; industrial triangle; sertão; tropical rain forest

Describe the following; discuss their importance in Brazil, and if possible, in the United States or some other country as well.

fazenda
hydroelectric power
infrastructure

Answer the following questions:
- Where are the most heavily forested areas of Brazil?
- Where is the driest region?
- Where is the densest population?
- Where are most mineral resources located?
- Where are the regions of commercial agriculture?
- Why is transportation often difficult in Brazil?
- How does the amount of rainfall encourage or discourage settlement?
- How does geography place perimeters of feasibility on development?

## Additional Readings

James, Preston E. Latin America. New York: The Odyssey Press. The section "Portuguese South America" gives an excellent detailed introduction to the geography of Brazil.

American Chamber of Commerce for Brazil. Natural Resources in Brazil: Building Blocks of Progress. Complete with charts, maps, and color photographs, this easily readable review of Brazil's mineral, agricultural, and animal resources also looks at their role in the nation's economic development. It is available, free of charge, from the Brazilian American Chamber of Commerce, 22 West 48 Street, New York, N.Y. 10036.

# A Historical Introduction to Brazil

Both Brazil and the United States were originally colonies of European powers, and thus share a common Western heritage. Within this common heritage, however, the development of each nation has been distinct. Today's Brazil is the direct result of 500 years of contacts beyond its borders and developments within its borders. The growth of traditional and modern social sectors which exist side by side, the gradual concentration of industrial activities in the Rio de Janeiro-São Paulo-Belo Horizonte triangle, and the role of government in the economy have all evolved over a long period of time.

As a colony, Brazil's economic development was directed by the needs of the European nations with which Portugal traded, and based on those products which Brazil had the geographic resources to exploit. Under the rule of an independent empire, the Brazilian economy never broke with the colonial role of producing economic goods according to European needs. Even during the 20th century, Brazilian development has been tempered as much by external events as it has been by decisions made within Brazil. Social and economic patterns emerged over this time, and long-existing and slowly-modifying customs, traditions, and "ways of doing things" now impinge upon any attempts to make radical changes. Thus, any consideration of introducing alternative social or economic patterns must take into account the reasons for, and ways by which, the actual patterns evolved.

Little specific knowledge of the history of the region that eventually became known as Brazil is available. The land was not occupied by highly developed indigenous civilizations such as those in the Andes Mountains, México, and Guatemala, which left cities and ruins reflecting their life-styles and beliefs, and whose surviving upper classes passed on some of their detailed knowledge to the colonizers. The Brazilian Indians were nomadic hunters and slash-and-burn farmers, organized into a number of small tribal societies, of stone-age cultures, which were often at war with one another. The total population of the region never reached two million before the arrival of the Portuguese. Many spoke languages of the Tupí-Guaraní family, which is still reflected in the names of many towns and rivers in Brazil. Other lasting influences were the use of the

pre-
colonial
Brazil

hammock and the eating of manioc flour (a staple, made from the cassava root), and the habit of frequent bathing (not customary in 16th century Europe).

Few of the settlers of the Americas were actively interested in the histories, cultures, religions, or customs of the peoples whose lands were being colonized. Therefore, few descriptions of these survive. The Portuguese colonizers originally saw the Indians as a source of labor and enslaved great numbers of them. After the first few decades of contact with the Portuguese, European diseases, enslavement, and warfare killed large numbers of Indians. Many Indian women lived with or married the Portuguese explorers, who usually came to Brazil unaccompanied by wives or families, giving rise to a relatively large racially-mixed population in São Paulo and in the interior of the North-East during the first few centuries of colonization. Other Indians retreated into the Brazilian jungle interior, where there still remain small, isolated tribes toward whom "civilization" only now is advancing, but with increasing rapidity and fatal consequences toward their cultures. These last remaining indigenous groups have received the attention of anthropologists for the last few decades, but as yet, little archaeological work has been done to learn the pre-colonial history of the ancestors of these people.

## Colonial Brazil (1500-1822)

Brazil was sighted and claimed for Portugal in 1500, during a period of colonial expansion throughout the world by the major European powers. Until the discovery of the Americas, this colonization meant establishing a system of economic exploitation of regional products which were valued in Europe. This generally implied establishing fortified trading posts where the riches of the area could be collected, often by barter, from the local people, and then shipped back to the mother country. The idea of permanent settlement, with economic investments, families, and future generations, was non-existent.

Brazil did not offer any such products for easy exploitation, and therefore the interest on the part of the Portuguese crown was minimal. Brazilwood, a valuable dyewood, grew in stands along the coast, and a few trading posts were set up. Only in 1532, after the discovery of the gold and silver in Mexico and the Andes, were permanent settlements established in Brazil. Since the Spanish had discovered gold and silver in their half of the Americas, the Portuguese, upon consolidating their claim on Brazil, hoped to make similar discoveries. Unfortunately for the Portuguese, Brazil had no such easy riches waiting to be found.

It was found, however, that some of the coastal regions were ideal for growing sugar, a product in high demand throughout Europe. Although this called for both investment and patience by the colonizer, sugar was valuable enough to be worth the effort. Before the colonization of Brazil, the Portuguese had already established an international sugar-processing system which linked the Madeira Islands' sugar production to refineries in the Netherlands, via the Portuguese ports of Lisbon and Oporto. Brazilian cane fit easily into an extension of this system, and for more than a century was the dominant export of the colony. A plantation economy developed, originally for the production of sugar, and later was adapted for the production of other crops. Large areas of land were dedicated to the cultivation of one predominant crop and worked by either indigenous or imported African slave labor.

sugar

plantation economy

Some of today's well-known families can trace their beginnings to plantation-owning ancestors of the 16th and 17th century Bahia and Pernambuco. The rural plantation was similar to the feudal fief. The owners, whose word was law in their territories, lived with their families in mansions with all the needed comforts imported from Europe. They had their own chapels, and usually their own resident priest (often a member of the family) to care for their souls and to educate their sons who might later finish their studies at the Jesuit colleges in the cities or at Coimbra University in Portugal. Often the owners had de facto armies to defend their interests. There were large numbers of slaves, with whom the owners often had a paternalistic relationship. On the biggest plantations, with both sugar mills and refineries, great wealth was accumulated; these were the families that could most easily make the transition to new areas of economic activity when necessary. This was the sector of the rural elite with the most power and wealth.

rural elite

Secondary plantations in these rural areas belonged to men without the resources of the larger estates. These plantations paid to use the processing facilities of the larger ones. While these estates did produce wealth for their owners, they were dependent on the good will and facilities of their competition. In times of economic decline, these landowners were more likely to suffer from changes in international demand and transitory wealth.

Another type of estate, the cattle fazenda, developed in the interior of the North-East because of the needs of the sugar plantations. Many of the sugar mills were powered by oxen, and cattle also hauled the cane from the fields to the mills at harvest time. During the rest of the year, it was preferable that the cattle graze in the interior, rather than in the regions that could be planted with cane. In time, some great semi-feudal fazendas emerged, especially along the São Francisco River valley, and secondary uses of the cattle--leather and meat--became economically important.

cattle fazenda

The wealth of the plantation owners, the colony, and Portugal rose and fell in accordance with the European demand for Brazilian products. From approximately 1550 to 1700, the main export was sugar. In the late 1600's, the English, French, and Dutch colonies of the Caribbean began to produce sugar which they could sell more cheaply because of the application of improved technology and the shorter distances involved in transportation. As a result, the demand for Brazilian sugar fell, along with the price of all sugar.[1] Other crops have gone through the same cycle: initial interest because of high international demand; whole regions dedicated to the production or collection of one cash crop; a period of great wealth and profit; competition from other parts of the world; a fall in prices; and finally a search for a new "high demand" product. There have always been secondary export crops and products, but because they generally provide less profit, they are often grown or collected by those who cannot effectively compete in the production of the dominant cash crop.[2]

foreign product demand and competition

cash crop cycle

A typical reaction to the speculative crop cycle was for the planters to invest minimally in production, accumulating maximal wealth, with the expectation of changing to the cultivation of another crop when world prices of the current crop fell. Little production was destined for Brazil's internal market which was not really worth much attention--the elite could easily afford to buy European imports, and the majority of the population, either slave or landless poor, had little money to buy anything and so provided for themselves by their own labor.

Portugal's profits

Portugal's royal coffers were enriched, not only through the collection of a percentage of the colonial production and by monopolies of certain products, but also through per capita taxes and import and export duties. It was in Portugal's interest that the colony not enter into manufacturing, and for this reason most industry was forbidden, with the exception of those products which were made to meet the basic needs of the slaves. It was preferable that Portugal buy and then export manufactures from Europe to Brazil and levy taxes, rather than allow Brazil to produce those same products.

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[1] Stanley J. Stein and Barbara H. Stein, The Colonial Heritage of Latin America: Essays on Economic Dependence in Perspective (New York: Oxford University Press, 1970), pp. 39-44.

[2] See Rollie E. Poppino's chapter "Boom and Bust" in Brazil: The Land and People (2nd ed.; New York: Oxford University Press, 1973), pp. 113-156.

alliance with England

Portugal was a small, resource-poor, and underpopulated country. During the 17th and 18th centuries, when the European nations were consolidating, and vying for power, she supported and was aided by England, in opposition to her traditional enemy, Spain, which sided with and was aided by France. This alliance allowed England an important economic role in the Portuguese territories. Brazil became more and more economically dependent on England, while remaining Portugal's political colony. With commercial transactions going via Portugal, the colony received English fabrics and chinaware, as well as iron plowshares and other tools needed for economic development and expansion. In exchange, England received Brazilian sugar, cotton, tobacco, and gold via Portugal.[3]

foreign interest in Brazil

The European power struggles of the 16th and 17th centuries were not without repercussions in the colonies of the Americas. In the 17th century the Dutch occupied Pernambuco for several decades, and the fighting disrupted the sugar production during most of the period. The French were unsuccessful in occupying territories for long periods of time, although they were especially interested in the Amazon basin. For many years, however, they raided the Brazilian territories and attacked ships from the colony. The Spanish, concerned with their own American colonies, did not actively try to occupy portions of the Portuguese territories. However, from approximately 1580-1640, while the two Iberian countries were united under one king, Brazilian expansion into Spanish territory was begun, later resulting in a war to determine the possession of Uruguay.

The dependence on commerce with Europe, as well as rough terrain and huge distances between the colonized regions, fostered coastal settlement with few important cities--ports which sent the production of the agricultural territories and the mines of Minas Gerais[4] to Portugal. These cities had warehouses for accumulating the cash products for export and stores selling European products to the colonists, as well as the governmental and religious administrative bodies. This commercial structure did not encourage movement deep into the interior or connections among various economic regions; the autonomous regions could communicate more easily with Lisbon than with one another.

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[3] Stein and Stein, op. cit., pp. 21-26.

[4] The Minas gold rush began in the final years of the 17th century. It attracted men from all over the colony and from Portugal to this region of the Brazilian interior. Plantation owners and their slaves from the declining sugar areas, men of the interior of São Paulo who had never taken part in the plantation economy, and freed slaves and other members of the lower classes not bound to work for others rushed to the region to discover gold and riches. Many were successful, but many more failed. Throughout the 18th century, the wealth of Minas Gerais was Brazil's most important export, and this gold contributed to a doubling of the entire world gold supply.

coastal settlement

The people in these cities were dependent on the wealth of the rural areas for their existence. Governmental administrators were there to tax the imports and exports, and to collect revenues due the crown. The Catholic Church tended to the spiritual needs of the people and the Jesuits established colleges to offer classical humanistic education to the sons of the elite.[5]

role of cities

Merchants sold their imported food, furnishings, and other luxury goods to the members of the rural elite. As the cities grew, many members of the urban elite were more of a middle than an upper class, but their lives, when compared to those of the rural landless and slaves, were quite comfortable, and they can be considered part of the elite in a society which consisted of two main subdivisions.

urban elite

The non-elite sector of society was numerically much larger than the elite. By far the largest portion of the lower class were the slaves, the mainstay of the colonial economy. They tilled the lands, worked in the mines, constructed the buildings, were the skilled laborers and artisans, served in the houses, reared the children and, in general, made possible the existence of the elite. The first slaves probably entered Brazil in the early 1530's, and slave trade was first limited only in the beginning of the 19th century. The Portuguese, through their African colonies, had a monopoly on the slave trade, and for centuries, Brazil was a certain market.

slaves

Brazilian slavery had some aspects which differentiated it slightly from slavery in the United States. In Brazil, slaves were a much larger portion of the total population, and there was a continuous flow of new slaves from Africa. Some facets of the indigenous African cultures infiltrated the dominant culture--a syncretic blend of indigenous and Catholic rite and beliefs, some African foods, music, dance, and instruments, etc. In Brazil, it was relatively easy for a slave (especially if he were a mulatto) to either buy his own freedom or be manumitted, and there were many more free blacks in colonial Brazil than in the antebellum United States. One of the first reasonably complete censuses in Brazil, taken in 1798, revealed a population of 3,248,000, including 1,582,000 black and mulatto slaves and

free blacks

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[5] João Costa Cruz, A History of Ideas in Brazil: The Development of Philosophy in Brazil and the Evolution of Natural History (Berkeley: University of California Press, 1964), pp. 30-31.

406,000 freedmen.[6] In other words, 20% of Brazilian blacks were free. The 1790 census of the United States revealed a total population of 3,929,214, including 697,681 slaves and 59,527 freed blacks.[7] Only 8% of the blacks in the United States were free.

lower classes

Another part of this lower class was a heterogeneous mixture of those who were neither slave nor master. It was a group at the periphery of society, people without education, needed skills, or land, people who were "free" but without the resources necessary for economic success. Many were descendants of unions between the original colonizers and explorers and Indians, others were runaway slaves and their descendants who had gone far into the interior to reestablish their lives in freedom. They all lived as best they could--some as subsistence farmers, others as cowboys on cattle fazendas, others as explorers of the interior, and yet others as outlaws when other options were unavailable.

results of colonization

The end of the colonial era came in 1822. There was no revolutionary war or battle for independence such as the Spanish and English colonies of the Americas had undertaken. Basic colonial social and economic structures were maintained when the colony became an empire. The Brazilian economy was oriented toward export production of agricultural products which would yield large profits because of the use of slave labor, rather than improved technology, and toward importation of most manufactures, ranging from necessities and luxury goods for the home to tools and machines basic to the economy. The cities were economic and administrative centers, and transportation and communication systems were designed to link the surrounding rural areas to port cities, rather than to connect the various economic regions within Brazil. The population, divided into a small middle and upper class and a large lower class was concentrated along the coastal areas with the exception of Minas Gerais and isolated farming regions in the interior.

Brazil's transition from colony to empire irrevocably began in 1808, when the Portuguese court fled Napoleon's invasion and set up court in exile in Rio de Janeiro. There had been rumblings of an independence movement in Minas Gerais in 1789, fostered by the belief that Portugal and her overseas empire were draining Brazil of monies and talents rightly those of the colony, but there was no organized, national revolutionary movement. The arrival of the king and his court, some 15,000 officials, servants, and functionaries, and the subsequent arrival of another 10,000 Portuguese (mostly nobles and well-born)[8] unleashed a string of events which led to the establishment of the empire in 1822. Brazil was soon elevated to coequal status with Portugal, with Rio de Janeiro as capital. The ports were opened to ships of all friendly nations, encouraging both expanded trade and immigration. Prohibitions against industry and manufacturing were ended. The printing press was allowed, so that the Brazilians could publish their own reading materials, rather than import them from abroad. Libraries, museums, and university-level departments were established. "Modern" European social and cultural values began to infiltrate colonial philosophy and customs.

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[6] Poppino, op. cit., p. 170.

[7] Donald J. Bogue, The Population of the United States (Glencoe, Illinois: The Free Press, 1959), p. 123.

Portuguese court in exile

In the wake of the court in exile came the French who, after 1815, were the largest foreign group in Rio de Janeiro. (The Portuguese were not considered foreigners.) "Hundreds of retail merchants, tailors, modistes, hairdressers, and the like arrived...to introduce something of Parisian style to the well-to-do residents of Rio de Janeiro."[9] The court in exile had stimulated the interest of the Brazilian elite in the sophisticated ways of Europe, and the French were copied in fashion and culture (literature, philosophies, and the arts). Using British commercial firms, Brazilians imported the trappings of modernity, ranging from fashions, home furnishings, and foods to cosmetics, perfumes, and soaps, and by the end of the 19th century, gas lighting, sewage systems, and tramways.[10]

French influence

### Empire (1822-1889)

By 1821, when the king was forced to return to Portugal or lose that crown through revolution, the newly cosmopolitan Brazilian elite had no desire to return to the colonial role of "second class" Portuguese subjects. Seeing this and seeing the revolutionary turmoil in neighboring Spanish colonies, dom Pedro, the king's son and his regent in Brazil, felt he had no choice but to declare himself Emperor of an independent empire, which he did in 1822. Thus, he conserved ties with Portugal through family relationship and avoided the chaos and destruction that the British and Spanish colonies experienced in their battles for independence. The social and economic structures which had developed under colonial rule were not endangered. But despite the maintenance of stability, the empire era soon became a time of conflict between the traditional values of the rural elite and the more modern values of the small but growing urban elite which admired the industrial and cultural progress of Europe and wished to emulate it in Brazil.

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[8] Poppino, op. cit., p. 182.

[9] Ibid., p. 183.

[10] See Richard Graham's chapter "The Urban Style" in Britain and the Onset of Modernization in Brazil, 1850-1914 (Cambridge: At the University Press, 1968), pp. 112-124.

national unity

For some time after the establishment of the empire, one of the main priorities was to consolidate Brazil. The regions which had functioned independently under colonial status were now expected to cooperate. The North-East, still heavily populated, had lost much of its economic power with the decline of the sugar industry a century earlier, but the agricultural elite was still very powerful socially and, by extension, politically. The South-East and South, which would grow in economic importance under the empire, had less population and less representation. The landowners, in general, continued to be much more powerful politically than the emerging urban elite. The Constitution of 1824 provided for a bicameral legislature: the upper house, appointed by the Emperor, was chosen from the traditional elite, and the lower house was elected from the different regions where traditional elites controlled electoral processes. Regional concerns dominated both houses. The Emperor was invested with "moderating power" to make final decisions. In this manner, one region or group was prevented from always dominating the others in national matters. It was hoped that this would prevent either revolution or secession.

government

regional wars

Defense was one of the major concerns of the national government. During the empire era, Brazil participated in several frontier wars with neighboring countries. For much of the latter part of the colonial period, possession of Uruguay had been contended by Argentina and Brazil. A war from 1825-1828 ended in the establishment of Uruguay as an independent nation and buffer zone between the two countries. Brazil intervened in Argentina in 1852 and in Uruguay in 1864. Far more important and costly, in lives and in money, was the 1865-1870 war of Brazil, Uruguay, and Argentina against Paraguay and its expansionist policies. This war highlighted the difficulties of defending Brazil from foreign encroachment because of deficiencies in transportation and communication which hindered the furnishing of war materials far into the interior. It also elevated the military to professional stature, giving it an importance which it never before had in Brazil.

British economic influence

With the establishment of the empire, the British had taken an even more dominant economic position, dealing directly with the Brazilians instead of with Portuguese middlemen. The historic ties and basic established patterns of imports and exports, as well as Great Britain's industrial development and domination of the seas, made it very difficult for any other nation to compete for this trade. British merchants, engineers, bankers, and industrialists went to Rio de Janeiro and later São Paulo where their economic influence was profound. The British established commercial firms which sent Brazilian agricultural products to England and other countries in Europe and the Americas, all on British ships. Increasingly after mid-century, the British helped convince the Brazilian government to support and invest in the establishment of railways and telegraph lines, thereby strengthening infrastructural supports which aided both the Brazilian producers and the British commercial firms. The British established banks to directly or indirectly finance or float loans in England for these improvements. They contracted to design and construct railways and improved ports which could handle increasing exports. They established insurance agencies. All these activities provided an infrastructure for development.[11]

beginnings of industry

The country began to industrialize. The scale and efficiency of the British import-export concerns allowed large amounts of money to return to both the government and individuals for investment back into Brazil. Better methods of transportation and communication were helpful to planters, who could more easily expand their holdings into the virgin lands of the interior,and to emerging industrial groups and European entrepreneurs for transporting raw materials to their factories. The first industries to develop were involved in textiles, wearing apparel, and some food processing, industries which had large internal markets. In every case, the British had the machinery and technicians necessary for the establishment of these industries, and therefore Brazilian dependence on the British was maintained.

coffee

growth of São Paulo

In São Paulo coffee emerged as a major export crop during the Empire. The coffee planters were a "nouveau riche" group just gaining entrance into the Brazilian elite. Their willingness to invest in the economic infrastructure, combined with the British interest in the expanding coffee export market, led to a heavy concentration of railways around São Paulo, facilitating the transport of crops to the port of Santos, as well as the expansion of the plantation lands far into the interior.

abolition

The British fostered many economic and social trends which pushed Brazil toward modernity. But they also helped to destroy slavery, the mainstay of the old economic structure. When slave trade was abolished in the British Empire in the 1830's, the attention of the abolitionists was focused upon the largest slave society, Brazil. The British applied all means of coercion, from moral pressure to gun-boat diplomacy

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[11] Ibid., pp. 73-111.

(raiding slave ships in mid-ocean), causing severe strain on the relationship between the two countries. They also encouraged and abetted the more modern-minded urban Brazilians to form abolitionist societies and agitate for the end of slavery. The Brazilian government slowly acquiesced to the British demands and, in 1850, the importation of slaves was officially halted although some slaves were still smuggled in.

The huge amounts of capital annually invested in the importation and purchase of new slaves were gradually diverted to investment in both agriculture and industry. The aristocratic Brazilian sugar planters, dependent on slavery as a source of cheap labor but now stripped of their economic dominance, and others dependent on slave labor defended the institution. They could not, however, override the growing interest in abolition in the newly-emerging power sectors of the economy and of the urban areas. Although it took more than fifty years of effort, slavery was abolished in 1888, with no compensation to the slave owners, thus voiding over $300,000,000 of agricultural investments and ruining many landowners, especially in the North-East.[12]

The gradual elimination of slavery had, in theory, freed a large portion of the population. In the 1872 census, out of a total population of 9,930,478, over 15%, or 1,510,806 were slaves.[13] In 1888, the remaining 700,000 slaves in Brazil were freed by governmental proclamation.[14] Some freemen went to the cities as skilled craftsmen to practice their trades. Others did manual labor, scorned by the urban elite, in nascent industries. Yet others joined the growing urban lower class which could offer only unskilled labor. In the 1870's, about 80% of the slaves had belonged to planters. As freedmen, many stayed on the land, forming new relationships with their ex-masters as sharecroppers or tenant farmers. Although slavery had not been an admirable institution, it had offered a certain security to the slaves. The basics needed for physical survival--food, clothing, and shelter--had been guaranteed, and the masters generally had cared for their property--providing some medical care, some training, some days without work, some favors to individuals. After abolition, the

ex-slaves

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[12] Clarence H. Haring, *Empire in Brazil: A New World Experiment with Monarchy* (Cambridge, Massachusetts: Harvard University Press, 1968), pp. 103-104.

[13] Poppino, *op. cit.*, p. 190.

[14] *Ibid.*, pp. 174-175.

master was no longer accountable for providing any security for the sharecroppers or tenants other than land to work. Some forms of the old patronage relationship remained. But without provision by law for formal education or other training, emancipation brought only freedom. It did not substantially change the ex-slave's political, economic, or social role, and it was not intended to do so.

immigration

Except for the period of the gold rush in Minas Gerais, beginning late in the 17th century, there had been little immigration from Portugal during the colonial era. Crown administrators were more often than not sent to Brazil for a set period of time. The other Portuguese who did immigrate were often small farmers who hoped to make their fortunes in the colony. Often not rich enough to set themselves up as plantation owners, they either became farmers of crops not requiring large numbers of slaves for intensive cultivation, or else they stayed in the cities as artisans or as part of the merchant class. But at the beginning of the period of exile, the king had become interested in establishing agricultural communities populated by immigrants from the Northern European countries. These people were believed to have better farming techniques and to be more industrious than immigrants from the Latin nations of Europe. With the hope that the immigrants would serve as agricultural models for the poor rural farmers of Brazil, lands were, at first, granted outright to them. From 1822 onward, the immigrants had to eventually reimburse the government. But by 1850, there were only fourteen settlements with a total population of less than 20,000.[15] Most of these farming immigrants went to the lightly populated southern states, where the climate is more temperate and similar to that of southern Europe.

Immigrants too poor to pay passage and costs of establishment in Brazil often indentured themselves to southern coffee plantation owners, who had recognized that slavery would not continue indefinitely. The growing need for manpower to expand agricultural production for export overrode the need for independent farming immigrants. But because of bad treatment given to many of these agricultural peasants by plantation owners who were used to working with slaves rather than free men, this plan did not succeed on a large scale. Some European nations forbade the emigration of their subjects to Brazil for a time because of this unsatisfactory situation.

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[15] Ibid., pp. 184-185.

European agricultural communities

Those who could pay their own passage and obtain land often settled in farming villages patterned after those of their homelands. Throughout the 19th century this trend continued. Brazil received a steadily increasing flow of European immigrants. It is estimated that by 1888 at least 750,000 immigrants had come from Europe, mostly from Portugal, Spain, Italy, Germany, and Poland. They continued in the mixed farming and livestock patterns of European farms, rather than in the Brazilian monocultural plantation pattern. Most often, isolated communities of one ethnic extraction were formed. Relying heavily on connections in the home country, they depended on relatives and friends when more settlers were needed, and imported teachers, doctors, and other skilled people, rather than make use of what skilled personnel Brazil could supply. Their standards of health and sanitation were much higher than in other Brazilian rural (and urban) areas. Consequently, although their birth rates were similar to those of other groups within Brazil, their growth rate was much higher because more children survived to adulthood. The rapidly growing population spread continually into the interior, opening up new lands while other older lands continued to be worked, a phenomenon not found in other parts of the country where lands were played out and then abandoned for long periods of time.[16]

movement to interior

In 1889 the Brazilian army, strongly influenced by French republican philosophies and the United States model of democracy led a bloodless coup d'etat and established a republic. Most of the military officers were modernizers. They saw the existence of the Empire as archaic, a hindrance to the development of the country. The abolition of slavery had greatly weakened the support which the landowners had traditionally given the Empire, making this takeover possible. Again, there was no public uprising clamoring for a democratic government. Neither was there a public defense of the existence of the Empire.

The Empire period had been a continuation of most of the colonial structures and institutions. The social division of a small elite and a large lower class remained intact. The elite expanded slightly to include the coffee barons and those who led in the development of industry, including some of the recent European immigrants. But the traditional poor did not improve their lot. Abolition had freed the slaves, but had not prepared them for entrance into the modernizing sector, and so most of them continued at the lowest level of society. Government was dominated by the elite, and their concerns were quite different from those of the rural and urban poor.

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[16] Ibid., pp. 186-187

Cities began to evolve into centers of social and cultural, as well as administrative importance, although a large portion of the population was still rural. They also began to grow as industrial centers, and in the South-East, the economic dominance of São Paulo had its beginnings.

By the end of the empire, the last vestiges of economic importance had left the North-East. The abolition of slavery had completed this transition. No longer the leading, richest economic region as in much of the colonial period, the North-East simply stagnated. The planters, unable to compete on world sugar markets, found no products of extremely high world demand to cultivate in place of sugar. The North-East became, and has remained, a poor, underdeveloped region. The South-East, with Rio de Janeiro as national capital, Minas Gerais as a source of raw materials for industry, and São Paulo growing rich because of coffee, developed steadily throughout the second half of the 19th century. The South began to develop, with many Northern European characteristics. While Europeans who had immigrated to the North-East had adopted Brazilian ways, these immigrants in the South adapted Brazil to their European ways.

During this era, an economic infrastructure began to radiate out from the various principal economic centers. Still, little emphasis, if any, was placed on connecting the different regions by overland routes or on heavy population migration to the interior. With the advent of the steamship to facilitate coastal travel, even some of the existing routes fell into disuse. Industrialization had gotten a foothold, but the indisputable dependence on agriculture for export and on imported manufactures remained.

## Republic (1889-1930)

The military declared the establishment of the republic in 1889, staying in power during a transition period which lasted until 1894 when the first civilian president took office. In 1891, a Constitution, inspired by that of the United States, was proclaimed and governmental institutions, similar in form to those of the United States, were established.

industrial development

The founders of the republic saw industrialization as the key to Brazil's development. But republican philosophy did not allow active governmental participation in the economy. They devised no central economic policy or development plan, but simply believed that development would occur naturally if individual initiatives were allowed and impediments to development removed.

Decentralization of government, another tenet of republican philosophy, allowed each state to collect taxes on exports to other states or nations and on industries. It had been decentralization of government

hoped that states would support the growth of industries. In practice, since the established exports were agrarian, the tendency was for states to support the expansion of agriculture. This was especially true in those states with no industry, where rural landowners controlled the state and local governments. It was less true in the South-East, around Rio de Janeiro and São Paulo, where most industries were already located.

Despite a decreased voice in national government during the first decade of the republic, the importance of landowners in regional politics did not diminish because of their continued dominance in the economy. Coffee continued to grow in importance as an export crop around São Paulo. Sugar continued as the main crop of most of the North-East. The rubber boom brought wealth and economic importance to the North for the first time.

rubber boom

Manaus, where the rubber barons lived, was the first city in Brazil to have electric street lighting, in 1896, and the opera house gave presentations by the most prominent international stars. During the 19th century rubber had grown in importance as an industrial raw material. With the invention of rubber tires for bicycles, and later cars, the supply could not keep up with demand and prices soared. Rubber gathering depended on the availability of a labor force to roam the rain forest, tap trees, and bring sap to central collection areas. During prolonged droughts in the North-East in the 1880's, many refugees fled to the North, expanding the labor force. Later recruiting throughout the nation brought even more unskilled, illiterate workers. The life of the rubber gatherer was difficult, and he usually earned less than he needed to survive. Growing indebtedness to the landowners' company store arrangements was inevitable, and rubber collection became a type of debt servitude, which ended only when the laborer died. Brazil was the only producer of rubber until the beginning of the 20th century, when seedlings smuggled out of Brazil began to mature. The boom peaked in 1910 and 1912. By 1913, British plantations in Asian colonies produced more rubber for the world market than did Brazil, and the North quickly lost its new-found economic importance because of this competition.

Soon after the establishment of the Republic, the government authorized a number of banks to print money, needed by planters trying to recover from the loss of huge capital investments with the abolition of slavery, and by industrialists who were encouraged by government to expand their investments. Easy credits, plus a new law limiting the liability of businessmen should their companies fail, allowed speculative economic investments, including many unsound "get rich quick" schemes. But before the end of 1891 the bubble burst, bankrupting both newly formed and established businesses, and sparking a period of economic depression, reflecting a period of world depression as well. The abundance of paper money with no backing other than good faith caused inflation within Brazil and devaluation in the international market. Foreign countries paid less for Brazilian products. In the case of most exports, however, monetary devaluation was accompanied by increased volumes of sales. Devaluation also meant that imports were more expensive, and this helped Brazilian industries. The federal government, dependent on import duties and tariffs for revenues, did not fare so well during this period. The lower level of imports lowered revenues, and it was increasingly difficult for the government to meet its international obligations. By 1898, even public works had halted, and the nation was on the brink of bankruptcy, saved only by a large loan from a major British banking concern, the House of Rothschild in London.

economic depression

During this period, the sugar economy of the North-East continued in its normal state of depression, even though the other regions were recovering. Sales of sugar did not increase in volume after devaluation, so planters suffered large losses in real income, and could often not continue in agriculture. Many plantations were absorbed by corporate interests which tended to concentrate lands into even larger holdings. While the traditional aristocracy of the region was being weakened even further, the personal paternalistic landowner/laborer relationships were eliminated on corporate lands, and the four hundred year old rural social structure of the region began to crumble.

depression in the North-East

From 1898 to 1902, austerity measures by the federal government, including the actual burning of paper currency, curbed inflation and economic instability, and contributed to a new period of growth and expansion. During this same time period the landowners regained power at the national level. This administration and those following disagreed with the republican premise that the future of the nation's economy depended on industry. Nevertheless, while the governments encouraged growth in the agricultural sectors, the high import duties and tariffs continued to function as protective barriers behind which industry grew.

landowner's political power

During the first decades of the republic, railroads expanded in the South-East, where agricultural production was moving further into the interior as soils of the old coffee areas played out. The principal ports, Santos, Rio de Janeiro, and Salvador, were modernized and rebuilt by contracted American, British, and French companies to handle increasing

modern infrastructure

exports. Some major cities were modernized--lighting installed, streets widened, trolley cars introduced as public transportation, sewage lines laid, etc. Electricity grew in importance, for lighting and for power in industrial plants. Many of the first power plants were located around the cities of Rio de Janeiro and São Paulo, utilizing nearby rivers for hydroelectric power generation. Industrial expansion was especially impressive in areas served by electricity. By 1907, Brazil had 3,258 industrial establishments, approximately half of which were involved in textiles and food processing. About 40% were in the metropolitan Rio de Janeiro region, with approximately 15% in both São Paulo and Rio Grande do Sul (where meat processing was especially important), and another 5% in Minas Gerais.[17]

industrial expansion

By 1920, São Paulo was the most important industrial area, with 31% of all production, followed by Rio de Janeiro with 28%, Rio Grande do Sul with 11%, and Minas Gerais with 5%. Industrialization was supported by the transportation system which had been developed for the export of coffee. Export taxes had made São Paulo the richest state in Brazil, and in addition, many European immigrants with industrial skills and knowledge had settled there. The planters, who controlled the state government, also helped the industrialization process. In São Paulo, planters had a tendency to reinvest a portion of their profits in other economic activities, chiefly banking and commerce. Some even began to invest directly in manufacturing, blurring some of the differences between the rural landowners and the urban, industrializing classes. In São Paulo, little or no social stigma was attached to industry, and state politicians were sympathetic to the problems of the industrialists.[18] All of these factors contributed to the growth of industry in this region.

growth of São Paulo

World coffee production had been expanding at a faster rate than world demand since approximately 1890. Where previously growing demand had pushed prices ever higher, overproduction and competition between coffee-producing nations had lowered prices radically. Coffee valorization, in which the governments of the coffee-producing states bought large amounts of coffee and withheld it from world markets until prices rose to a minimum acceptable level, was decided upon

coffee overproduction

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[17] Ibid., pp. 228-229.

[18] Ibid., pp. 228-230.

in 1906. In 1907, only 75% of the Brazilian production could be sold, and then at the lowest price in twenty years. This plan continued until 1924, when the federal government assumed the responsibility of valorization. Every year, over half of all of Brazil's exports were coffee, and the economic stability of the nation depended a great deal on stable or rising world prices. Continual overproduction and stockpiling, as well as competition from other coffee-producting nations, caused the system to collapse in 1930 under the pressures of the depression.

foreign economic interests

Foreign firms flourished during the initial part of the 20th century. Although Great Britain was still the major investor, firms from the United States, Germany, Belgium, and France were competing with them. During the first decade, a majority of all newly formed companies (160 out of 201) were foreign owned or controlled. Their activities were often in the infrastructure--banking, public works, utilities, and transportation--as well as in mining and production and shipping of agricultural exports.[19]

Spurred on by World War I, industrial growth expanded. The German navy made transatlantic shipping difficult and attacked ships of the Brazilian merchant marine.[20] Brazilian industries filled the void that appeared when European products were no longer available. During this period, exports included manufactured items. But the 1920's brought a difficult period for Brazilian industries. The resumption of peacetime economic activities in Europe and the United States meant that, once again, manufactures had to compete with foreign products. Overseas markets were again buying Brazil's agricultural exports, helping them to reaffirm their dominance in the Brazilian economy. At this time, the United States replaced Great Britain as the most important foreign investor.

developmental debate

During the twenties, "even those who argued that Brazil should not attempt to compete with the more advanced countries in the manufacture of products requiring a high level of technological development came to feel that Brazilians were neglecting opportunities well within the competence of local entrepreneurs and the labor force."[21] This debate focused on three main topics: in spite of vast forests, imported wood pulp and newsprint were needed by the publishing industry; the only cement plant in the nation, which had started during World War I, failed while Brazil imported hundreds of thousands of tons of cement annually; and with great known mineral reserves, Brazil had to import iron and steel.

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[19] Ibid., p. 227.

[20] João Pandiá Calogeras, A History of Brazil, trans. Percy Alvin Martin (New York: Russell & Russell, Inc., 1963), p. 311.

[21] Poppino, op. cit., p. 246.

electricity

In this last decade of the republic, foreign capital contributed greatly to the doubling of electric power generation. Two main foreign groups were involved. One, financed by American, Canadian, and British capital, supplied the entire Rio de Janiero-São Paulo-Santos area. Other large communities were served by a private corporation headquartered in the United States. Thus, foreign managers and owners were responsible for the provision of electric power, upon which most of the potential industrial expansion depended.

Given these problems, even though absolute production had grown by 1929, the number of industrial firms had decreased. Brazilian industries did continue to diversify, and by 1930, clothing, chemicals, pharmaceuticals, lumber and wood products, metallurgy, tobacco processing, glass, ceramics, and leather were expanding fields. But 40% of the industries were still involved in food processing, while 25% produced textiles. Industrial concentration continued in the South-East and South, where 75% of the 13,569 firms were located.[22]

international relations

In 1889, international recognition of the United States of Brazil came from American and European nations. Border disputes with a number of neighboring nations, of growing importance because of the rubber boom, were gradually resolved with the help of international mediation. Brazil also began to participate in major international conferences, including those of the Pan American Union, later to evolve into the Organization of American States. After World War I, siding with the Allies although sending no troops into battle, Brazil participated in the Versailles Treaty Conference and was a charter member of the resultant League of Nations.

Gaining acceptance of the new government from within Brazil proved to be a more complex undertaking. Establishment of the republic was not actively opposed, and soon many of the more able politicians joined the new government. Still there was a difficult transition era--an unexpected result of some of the new government's policies. Decentralization of government allowed regional sentiments, somewhat under control during the centralized empire, to surface. The vast size of the country, the poor internal communications and transportation systems, and the discrete regional economies had contributed to regionalism, rather than to a sense of nationalism. A secessionist movement raged in Rio Grande do Sul, the southernmost state, from 1892 to 1895, supported by the navy. Although the revolt was suppressed, discontent in the region continued throughout the republic. At another time, in Pará, in the North, revolution threatened. There was a rebellion, too, in the interior of Bahia that was eventually suppressed.

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[22] Ibid., p. 229.

regionalism

The republic survived the first chaotic decade intact. In later years, dissatisfaction was not often expressed in armed regional rebellion. State governments were strong enough to function within a framework of regional interests while remaining part of the nation. National governments were dominated by politicians from São Paulo and Minas Gerais. There was generally smooth transition from one administration to the next, perhaps because the administration candidate always won the presidential election. But the people of other states, especially those of Rio Grande do Sul, continued to be discontented at their exclusion from national political prominence.

With the establishment of the republic, the military became actively involved in politics. They stayed involved, although not always as overtly as during the first years when military men were positioned at all levels of government. The military took upon itself the "moderating power" which previously had belonged to the Emperor. They could intervene in government, making arbitrary decisions on the basis of national interest, whether or not their decisions had majority support.

military
in politics

Censorship of the press and spying on the opposition politicians were prevalent practices. As long as the federal government had the tacit support of the military, its continuance in power was assured.

During the 1920's, various governmental policies, including giving military leadership positions to civilians, antagonized the armed forces. A garrison in Rio de Janeiro revolted unsuccessfully in 1922. In 1924, another unsuccessful revolt broke out in the São Paulo and Rio Grande do Sul garrisons. The defeated rebels, mostly from the ranks of the younger officers, fled to the interior, joined together, and for more than three years roamed about, waging guerilla war on the government. In 1927 they were finally defeated.

Immigration became an increasingly important demographic factor during the republic. By 1920, some 3-1/2 million foreigners (predominantly European) had settled in Brazil. They continued to concentrate in southern Brazil, often in urban areas, bringing skills and attitudes which contributed to industrialization. In the South-East and South, the educated sons of many immigrants were also entering the growing industrial class. Immigrants brought news of major European events --including political debates and labor agitation. Some of the immigrant radicals, including Italian socialists, Spanish syndicalists and anarchists, and German social democrats, protested Brazilian social and economic conditions. The actions of these independent labor groups were often put down with force, and for some time there remained the feeling that labor activists were political subversives.[24]

immigration

Governmental policies began to change toward the immigrant groups. During World War I, German agents had actively tried to mobilize the German population, many of whom were second or third generation Brazilians. The government had never before opposed the close-knit German immigrant colonies, but eventually, a national policy was adopted that Portuguese must be the language of instruction in all schools. This measure was designed to further integrate German-Brazilians into the mainstream of national life.

Although the founders of the republic extended franchise to all men who could read and write, the electorate remained only about 5% of the population.[25] A majority resided in urban areas where the interests were different from those of the rural elite that had previously dominated government. The problems of the landless, uneducated rural farmers and laborers and of the urban lower classes continued outside the consideration of the electorate. The basic social structures changed very little during the forty years of the Republic. The upper classes were slightly modified as newly rich industrialists gained more equality with the traditional landed aristocracy of the North-East, many of whom had lost family fortunes with the final sugar decline. The lower classes simply continued to grow.

voting
electorate

Although the economy of the nation was still dependent upon the export of agricultural crops, Brazilian industries grew steadily but unevenly through much of the republic period.

The world-wide economic crises heralded by the 1929 American stock market crash had immediate repercussions for the basis of the Brazilian economy--coffee. Prices plummeted, and the volume of sales dropped. As the national economy faltered, the personal economies of both the rich and the poor also suffered--but especially those of the poor.

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[24] *Ibid.*, p. 236.

[25] *Ibid.*, p. 231.

## The Vargas Era (1930-1945)

As the economic situation deteriorated, dissatisfaction with the federal government's inability to improve conditions mounted within supporters, as well as detractors, of the regime. In October, 1930, young military leaders from Rio Grande do Sul, Minas Gerais, and Paraíba revolted in a coordinated effort, and quickly gained support from other garrisons. As soldiers from Rio Grande do Sul approached Rio de Janeiro, leaders of the military stationed there joined the revolt, supported by many unhappy with the actions of the federal government--coffee planters, political liberals, modernizers who wanted democratic practices and electoral reform, and opposition leaders. Getúlio Vargas, a landowner from Rio Grande do Sul and acknowledged leader of the opposition, was soon appointed head of the provisional government by the junta. For fifteen years, he dominated Brazil. As head of the provisional government until 1934, as elected president until 1937, and as self-appointed dictator until 1945, Vargas made decisions and established policies for the entire nation.

As the coalition of divergent interests quickly began to disintegrate, young military leaders, the backbone of the revolution, continued to support Vargas. They dominated the armed forces. They felt that Brazil should be directed toward rapid social and economic development by a strong, authoritarian government, and Vargas was amenable to this idea. He eventually built up control over the military through judicious use of his powers to promote and strategically station friends and supporters within its ranks. As long as Vargas retained the approval of the military, he stayed in power.

centralization of government

National government became increasingly centralized, and control over the states grew. Vargas disbanded state armies. In states whose governments were least supportive, he appointed "interventors" to rule, weakening the traditional state political machines. In 1932, wanting a return to elected government, the state of São Paulo attempted to secede and was vigorously suppressed by the military. In 1936, in Rio de Janeiro and Natal, a communist-led revolt in the army was put down. At other times, Vargas declared a state of siege to control potentially explosive situations. Newspapers and magazines were censored. Political dissidents, including leaders of the opposition, were jailed. The opposition, from many sectors of the political spectrum and neither organized nor coordinated, served as an excuse for Vargas to expand the power of the federal government and his control of that power. But Vargas also instituted some liberal policies--women's suffrage, the secret ballot, proportional representation in the legislature--in an attempt to gain support from more social sectors.

governmental economic involvement

The increasing governmental involvement in the economy favored industrialization and the industrial labor force. The Ministry of Labor, Commerce, and Industry was formed soon after Vargas took power. In 1931, government-controlled paternalistic labor unions (an echo of the old, rural semi-feudalism) with the right to collective bargaining were formed. Minimum standards of health and safety, job security, the eight-hour day, and other benefits were established. In 1936, the first minimum wage laws were implemented. This labor legislation directly affected industrial workers, who comprised about 15% of the labor force. But these rights and privileges could not be enforced in the case of the remaining 85% of the labor force, consisting mainly of rural laborers and domestics.[26]

import substitution industrialization

Lack of revenues to buy imported products, due to the depression, gave additional impetus to import substitution. Vargas actively encouraged people to buy products made in Brazil. This did not necessarily mean buying products made by Brazilian owned and operated companies, however. Companies which previously exported to Brazil began to establish manufacturing plants within the country. The effect was twofold. Negatively, it hindered the development of completely Brazilian industrial organizations in fields where foreign companies were already successful. But positively, it expanded both the volume and variety of products manufactured, or at least assembled, in Brazil, formed new or additional markets for raw materials, increased the opportunities for industrial employment, and demonstrated the use of new methods and skills in industrial production.[27] In 1934, the Ministry of Labor, Commerce, and Industry proclaimed that at least two thirds of all positions within a company had to be filled by Brazilians. Rural laborers began to migrate to the cities, in search of industrial jobs and the benefits which they afforded. At the same time, more landowners began to invest in industries. While foreign investments had previously been important in the economic infrastructure, the 1930's marked the beginnings of the multinational corporations as we

multinational corporation

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[26] Ibid., p. 262.

[27] Ibid., p. 260.

know them today, with direct involvement in manufacturing processes.

agricultural cartels

Government involvement in the agricultural sector of the economy included the reorganization of the Brazilian Coffee Institute. Other government cartels were also formed to try to protect other agricultural exports--cacao, sugar, tobacco, cotton, pine lumber--with similar price-supporting valorization plans. These gave agriculture some stability and helped prevent the total collapse of the agrarian sector during the depression. Nevertheless, from 1929 to 1932, export volume dropped 37% while value fell 67%.[28] The new government could tax exports,[29] but the drop in value seriously affected the national government's ability to service its debts. Most revenues were used for social welfare and public improvements, rather than for repayment of the public debt. By the end of the decade, the Vargas regime defaulted on international payments. New high duties on imports, especially on luxury items, were enacted, but they brought few revenues to the national government because of the low volume bought. Eventually tariffs were lowered, notably on raw materials and semi-manufactures needed for the continued expansion of the developing industries.

industrial growth

Industrial growth continued in those areas served by good transportation, communication, and power. Almost 50,000 industrial establishments existed by 1940. São Paulo alone had 29% of the plants, 35% of the industrial labor force, and 43% of the value of manufactures. Rio de Janeiro, Rio Grande do Sul, and Minas Gerais continued to follow in importance. Food processing, textiles, and clothing accounted for two thirds of production.[30] Yet, in spite of the growth of industry, Brazil "was not wholly self-sufficient in a single major branch of industry."[31] Basic machinery was still imported rather than produced within the country. The kinds of manufacturing which could be introduced depended on various processes requiring the availability of different chemicals. Chemicals could be produced in Brazil, but their production was based upon the importation of sulphur and nitrates.

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[28] Ibid., p. 258.

[29] This function had previously been reserved for state government.

[30] Poppino, op. cit.

[31] Ibid., p. 266.

During World War II, the inadequacy of transportation facilities, which had been badly ignored during the Republic, became obvious. Vargas, too, although he had nationalized some railroads, had basically ignored transportation. Transatlantic shipping was dependent on foreign ships; these were diverted to the war needs of allies or hostile nations. The North and North-East, connected primarily to the rest of Brazil by coastal shipping, was effectively isolated because of German submarine attacks. In the South and South-East, where trucking was important to internal transportation, shortages of fuel, most of which had to be imported, caused additional hindrances. Vargas had tried to negotiate with the Germans, whose fascist state was in some ways similar to his own administration, but in 1942, Brazil joined the Allies, and in 1944 sent a force of 25,000 men to fight in the Italian campaign. In part, the decision to join the Allies was based upon American promises of aid and assistance in building the Volta Redonda steel mill, in exchange for permission to establish air bases along the North-East's coast to be used during the African campaign. Self-sufficiency in iron and steel had been a goal, especially of the military, for some time, and Vargas too, very much wanted it.[32]

transportation

As the Allied forces began to control German submarine activities, transatlantic shipping was again possible, but imports in Brazil were almost totally allotted to coal, to keep power and transportation systems operative. In 1942, the Roosevelt administration sent a technical mission to make a systematic analysis of Brazilian resources, marking the beginning of several years of close cooperation between Brazilian and American planners. Brazil was called upon to export strategic minerals and raw materials for the Allied effort, which contributed to a large build-up of foreign reserves by the end of the war.

After World War II ended, the Brazilian military's support for the Vargas dictatorship diminished. In response to the changing world situation, Vargas eased censorship and began to release political prisoners, while promising free presidential elections in which he would not be a candidate. As opposition ideas began to be voiced and published, and as political parties began to emerge, Vargas, the "Father of

opposition to Vargas

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[32] After the war, Volta Redonda, the largest iron and steel works in Latin America, was financed by some $45 million in Export-Import Bank loans from Washington, and over $55 million of Brazilian government funds. The participation of private Brazilian capital had been encouraged, without success.

the Poor," continued to be the hero of the working classes. To guarantee that the 1946 presidential elections would occur without Vargas, the military forced him to resign in October of 1945.

social
development

In the area of social development, the Vargas era was a period of opportunity in industrial urban areas, especially in the South-East. This was a first period of fairly far-reaching social mobility for some portion of the non-elite. While federal legislation curbed immigration for the first time, industrial expansion offered positions to growing numbers of the most able of the lower classes, allowing vocational training and the development of new skills. A rapidly expanding governmental bureaucracy employed much of the nation's middle class. Urban population had grown rapidly during this period. Only 10% urban in 1920, the Brazilian population was 20% urban by 1930, and the percentage continued to grow.

The internal market for industrial products also grew, reinforcing the cycle of industrial expansion. Labor legislation altered the lot of the industrial employees, causing rapid improvements in their status and expectations, and sharp differentiation from the rural laborers. The Constitution of 1934 made primary education a right of every citizen. This, however, remained a goal, rather than a reality. But at all levels, educational facilities expanded markedly between 1930 and 1945: the number of both schools and teaching staff doubled, and the enrollment at all levels was up 150%.[33] Rural people, who were little affected by these basically urban phenomena, learned about the opportunities of the cities through word-of-mouth and radio communication. They were attracted in growing numbers, looking to the industrial cities for factory work. Overall, however, the social improvements which occurred during the Vargas era were an important, but only a seconday, result of the goal of most of his policies--rapid industrialization.

The Vargas era was the transition period between traditional and modern Brazil. It was a period of development, not only of economic growth, but also, because of the labor legislation and the government's assumption of some social responsibilities, a period of improvements in socio-economic well-being for large numbers of people. The importance of industry and of the urban areas would never again be overshadowed by agriculture and the rural areas.

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[33] John J. Johnson, Political Change in Latin America: The Emergence of the Middle Sectors (Stanford, California: Stanford University Press, 1958), p. 164.

## The Post-War Period (1945-1964)

Many of the trends which originated or began to develop during the Vargas era gained momentum during the post-war period. In many cases they accelerated to a point where they were very much out of control by the 1960's.

populism

Through the expansion of educational opportunities and franchise, a new element had been added to the electorate, no longer restricted to the upper classes and dominated by state political machines. Voting power gained by the "people," the lower and lower-middle classes of the urban areas, could not be ignored. When democratic processes were reinstated, the people became an increasingly important factor in politics. Under Vargas the people had learned that governmental decisions could positively affect their status, and they aspired to even better lives. They learned that they could voice protests about politicians and living conditions through their actions at the polls.

Politicians learned that winning candidates were usually those who promised the most to the largest number of people. With almost no commitment to general principles or to clear ideology by the politicians, elections were decided by "charismatic" relationships between candidates and their followers. Politics became dominated by promises and dreams, often with little knowledge or preoccupation about what it would cost Brazil to realize those dreams. Both industrial growth and economic nationalism became themes which grew in importance. Independent industry was seen as that which gave a country prestige and power in international circles, and Brazilians believed that their country deserved such recognition. Political parties proliferated. Radicals of all sorts and demagogues, as well as some more traditional politicians, won local, state, and national elections. The military intervened occasionally to curb excesses, but increasingly, Brazilian politics came to be regarded as unstable.[34]

Euricio Gaspar Dutra, the first president of the post-war period, had been supported by a political party founded by Vargas. He came to be known as a man who strictly adhered to the new Constitution, issued in 1946. Before it was approved, however, Dutra ruled by decree as had Vargas and the interim president. During Dutra's term, foreign reserves which had built up during World War II were used to rehabilitate and expand the transport system, to start construction of the Paulo Alfonso power project to serve the North-East, to reduce some foreign debts, and to import needed agricultural machinery, trucks, busses, and cars, and the luxury goods which had been sorely missed by the elite for so long. At first a free trade policy existed for imports, but within three years, foreign reserves were almost gone, and government import licenses were issued. Imports were given priorities on the basis of need: some products could be imported without any restrictions, while others could not be imported at all and had to be manufactured within Brazil. This served to foster the expansion of manufacture of some consumer goods. In addition, foreign investments were encouraged.

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[34] See Juarez R. B. Lopes' article., "Some Basic Developments in Brazilian Politics and Society," in Eric N. Baklanoff, editor, New Perspectives of Brazil (Nashville: Vanderbilt University Press, 1966), pp. 59-77.

industrial expansion

By 1950 the industrial boom, based largely on import substitution of consumer goods, was reflected in a greatly expanded volume of production, numbers of industrial establishments, and numbers of workers. Foodstuffs and textiles declined to about half of all production, by value, while metallurgy, refining, and manufacturing of equipment and machinery for electrical, communication, and transportation industries grew. The concentration of industrial activities in the South-East continued, São Paulo registering the largest gains. This region had much to offer a new industrial establishment, ranging from readily available skilled labor and auxiliary goods and services, and nearby sources of many supplies, to large, experienced financial institutions. During the late 1940's the price of coffee on the world market had soared, contributing to the favorable trade balance which Brazil experienced during this period. During the first years of Dutra's term, inflation was low because government spending was kept close to budget.

New social service benefits were offered to workers in both industry and commerce through new governmental agencies, financed by mandatory taxation of employers, based on company payrolls. Labor unions grew in size and number, but communist infiltration into a number of unions was unacceptable to many governmental leaders. When the party was declared illegal in 1947, many labor leaders were removed from office and some unions were suspended.

As the economy expanded, urbanization continued at a rapid pace. Population itself was growing at a rate of over 3% annually by 1950. As the urban areas grew, the demand for public services and utilities did, too, but they could not always be met. Education, too, was lagging in proportion to the needs of the rapidly industrializing nation. In spite of the boom, by the end of Dutra's term, the level of living for wage earners and salaried employees was lower than at the end of the Vargas era, because of the inflation of the pre-election period.

Brazilian-American relations were very good during this period. Truman visited Rio de Janeiro in 1947, and Dutra visited Washington in 1949. In 1948 there was a joint venture by the two nations, in which the development needs of the major sectors of the Brazilian economy were surveyed and projected. This was followed by the first major Brazilian development plan, SALTE. In was designed to cover the period from 1949-1953, and to develop the physical, economic, and social bases, by directing federal investments into sectors such as health, food supply, transportation, and power, vital to economic growth but unattractive to private investors. Since this period, large-scale intervention into economic activities has been one of the basic features of government in Brazil.

Brazilian-American relations

development planning

As the 1950 presidential elections approached, the government issued new money and expanded credits, contributing to a 6% inflation that year. Amidst growing nationalism and demands for further rapid development, Vargas, still the hero of the people, was elected president. This was seen as a mandate for more state intervention in the economy. But Vargas' ideas were offset by the Congress which was largely composed of moderates and conservatives who had governmental power. Vargas could no longer dictate, as he had done in the past.

Rapid industrial expansion was still a goal, even though the SALTE plan was watered down and revised under the Vargas presidency. Emphasis remained on industrial expansion at the expense of the agricultural sector which received little aid. In 1951 a Brazilian-American Development Commission convened to approve the financing of development projects, especially in power generation and transportation. Out of this, the National Economic Development Bank was founded in 1952 to accumulate and provide local currency for approved projects.

The outbreak of the Korean War scared many Brazilians who imported and stockpiled goods which would no longer be available if the war expanded. As a result, foreign reserves were exhausted. By the end of 1952, Brazil was some $600 million in debt, half of which was owed to American exporters. At the same time, Brazilian-American relations were deteriorating. It was felt that the United States, preoccupied with Korea, the beginning of the "Cold War," and the Marshall Plan in Europe, was paying less and less attention to Brazil, a faithful ally, when help was still needed.

Brazilian-American relations

Economic growth emphasized Brazil's dependence on foreign sources of petroleum, needed for fuel and industrial derivatives. Petroleum became a very emotional issue in 1953. Reserves of oil in Bahia which were being explored and extracted by foreign companies were nationalized. Private

petroleum

companies, however, were still allowed to work in certain facets of refining and distribution. This all happened in response to the clamoring of ultra-nationalists--"The oil is ours!"--but it really did nothing to affect the dependence on foreign sources of oil.

By 1954, the economic situation was a difficult one. Brazil's international credit worthiness had deteriorated. Communists were agitating, and there was labor unrest. Since 1950 there had been almost 200% inflation. Vargas' labor minister, João Goulart, considered a communist by the military, had raised the minimum wage to the level of pay of army second lieutenants, making industrialists very unhappy. The oppostion attacked both Vargas and his minister, accusing them of all kinds of wrongdoings ranging from mishandling of public funds to illegal cooperation with Juan Perõn of Argentina. In August the military removed Vargas from office and two days later he committed suicide.

Between Vargas' death in 1954 and the inauguration of the next elected president in 1956, three interim presidents served.[35] They were more conservative economically but had little power, and the negative trends which had begun under Vargas continued. World prices for the traditional agricultural exports continued their decline while inflation continued to rise. However, import substituting industrialization continued, and some governmental decrees, which facilitated the import of capital goods, stimulated the flow of foreign investments into Brazil.

Juscilino Kubitschek

In 1955, Juscilino Kubitschek was elected president. His slogan was "Fifty Years of Progress in Five," and his campaign platform was a series of thirty economic goals which evolved into a five-year development plan when he took office. He had been one of Vargas' protegés and an enthusiastic nationalist, and he was supported by many diverse sectors within the electorate.

economic growth

The five-year plan was successful in many ways. The annual economic growth rate during this period was 5.9%, and in the manufacturing sector it was 10.3%.[36] The labor force expanded markedly, and the unions continued under the control of the government. Brazil became self-sufficient in cement production. Steel production almost doubled. The automobile industry, which previously had only assembled imported parts, changed toward production as well as assembly of those parts. By 1960, 90% of every car (by weight) was produced in Brazil. The merchant fleet expanded to become the largest in Latin America. A number of hydroelectric projects were begun, and 11,000 miles of highways were built.

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[35] João Café Filho, the Vice President; Carlos Luz, President of the House of Deputies; Nereu Ramos, President of the Senate.

[36] John Philip Dickenson, "Regional Implications of Economic Development Programmes in Brazil" (unpublished paper presented at the British Association for the Advancement of Science Annual Meeting, 1971), p. 4.

The state-owned petroleum monopoly, Petrobras, received full federal support, and oil production expanded over thirteen times.[37] The government became increasingly involved in the economy, although private capital played a role, too. Both agriculture and education received some attention, but to a lesser extent than most industries. Foreign investors, attracted by Brazil's stability and optimism and by Kubitschek's desire for foreign capital, supplemented both government and private spending. In fact, by 1961, foreign capital accounted for almost one-third of the annual economic investments. About 75% of this money went to heavy industry, leaving only 25% for the expansion of light industries, including food processing. Much of this foreign capital was invested in subsidiaries of multinational corporations. There were also some joint ventures. The foreign investors most involved were from the United States, France, West Germany, Italy, and Japan, in that order.[38]

foreign
investments

In most economic sectors, Kubitschek's plans were based on previously established practices. Industrialization aimed at production for the domestic market, to lower the dependence on imported goods. Capital goods, coal and petroleum, and foodstuffs were still imported in large quantities at the end of this period, but consumer goods dropped to a very small percentage of the total imports. The massive inflow of foreign capital plus the protective barriers which drastically limited competition from foreign manufacturers with their lower production costs and therefore lower prices contributed directly to the success of Kubitschek's five-year plan. But by 1960, foreign enterprises controlled 69% of the automobile industry, 62% of the pharmaceutical industry, 57% of the manufacture of automotive parts, as well as major portions of machinery manufacture, and the chemical and plastics industries. Economic nationalists decried this, as well as the fact that foreign-owned industries averaged $33 million annually, during this period, in profit remittances.[39]

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[37] Poppino, *op. cit.*, p. 277.

[38] Eric N. Baklanoff, "Foreign Private Investment and Industrialization in Brazil" in Eric N. Baklanoff, editor, *New Perspectives of Brazil* (Nashville: Vanderbilt University Press, 1966), pp. 108-112.

Brasília

For many years, people had spoken of building a new capital city in the Brazilian interior. It had been part of every Brazilian constitution since 1891. Kubitschek realized this dream, seeing a new capital as both a catalyst for development of the interior and a way of escaping the confusion and congestion of Rio de Janeiro. In 1957, construction began on Brasília, located near the eastern border of Goías, in the Central-West region. There were 30,000 construction workers in Brasília, and another 34,000 working on two major highways to connect the new capital to the North and the North-East. Until some roads were extended to Brasília, construction machinery and materials were flown into the area. No expense was spared, and in 1960, Brasília was inaugurated as the new capital.

development of the interior

Brasília opened up the south-central region of the state of Goías. It facilitated the influx of population and freed the small local population from dependence on local production. Development of the area was first based on the labor-intensive construction of the large, modern city and its requirements. Most of the population was therefore urban oriented, rather than agricultural. Some food processing industries began to develop, but the potential for most economic expansion seemed to be in commercial agriculture, where capital intensive methods could make the surrounding lands productive. The continued expansion of the coffee culture was responsible for expansion into the interior west of the city of São Paulo. As lands became played out and less fruitful, new lands for cultivation were the basis of steady production, rather than improved farming methods. In the South, too, small diversified farms continued to move further into the interior.

In 1958 a bad drought occurred in the sertão of the North-East. Refugees fled to Brasília, looking for construction work, and to the state of Maranhão, where they could continue subsistence farming, as well as to the cities. In years before, every time these droughts occurred, attention focused on the extreme underdevelopment of the region. Federal public works programs were established and generally ended when the rains came, or else became centers of local political maneuvering and corruption. In 1959, Kubitschek set up a new federally-funded, but autonomous, regional

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[39] Ibid., pp. 112, 129.

regional development agencies

development office, SUDENE, to help the region. SUDENE was well received by most sectors of the Brazilian populace and received favorable international publicity, including United States financial support, partially because of the United States' fear of communist infiltration into a growing peasant movement demanding land reform in the region.

Part of the problem of the North-East was the remnant of semi-feudal land tenure. Lands were occupied by large fazendas, whose owners depended on cheap labor for their profits and were not interested in industrial development or in redistribution of their lands. Many people had access only to small subsistence plots. SUDENE professionals believed that the economy of the region had been penalized by federal policies which stimulated industrial development in other regions at the expense of the North-East, and they set about establishing policies and projects to develop the region. They hoped to change the land-tenure structures, develop irrigation facilities, expand roads and electrical availability, and improve the market system for food crops. Along the coast, they hoped to develop the fishing industry. Textile plants, which were about the only industrial base, could be reopened and expanded. New tax and exchange rates would be used to attract industry. Farmers could be encouraged to move into Maranhão where lands were still available, lessening the pressure on the over-used land. By 1960, plans were being formulated and implementation was beginning.

When Kubitschek's term was over, Brazil was developing at the fastest rate it had ever experienced. Costs for reaching his goals had been very high, and they had been partially covered by the printing of more currency, giving an illusion of prosperity in which most people believed. Opponents ridiculed his slogan, saying "forty years of inflation in four." Still, Brazil was optimistic about its future. Borrowed monies could be repaid at a later date. The steady inflation which passed money from the consumers to investors had served to stimulate growth. Numbers of workers in industry and construction expanded greatly during this period with many people benefiting from steady work and labor benefits for the first time. São Paulo further expanded its lead over the rest of the nation. In 1960, it had one third of all industrial plants, over half of all industrial workers, and over 55% of the industrial output.[40] Indeed, much of the South-East and South had benefited during this period.

Many of the imbalances which had been worsened by the magnitude of aid to industrial development were becoming obvious. The differences between urban and rural areas became even more extreme. Agriculture, education, most regions outside the South-East and South and the Federal District, and the diversification of exports had been ignored. Although the nation was now 45% urban, the agricultural distribution system was backward, making it difficult to transport the needed quantities of foods from rural to urban areas. In the North-East, the movements of peasants who were demanding land reform were gaining momentum.

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[40] Poppino, op. cit., p. 374.

growing internal imbalances

Attempts to develop better ties with the communist nations worried both the rich and the military, and when the president resigned with no explanation after serving only seven months, a political crisis resulted. The popular vice-president, João Goulart, had been Vargas' labor minister and was considered much too radical by the military to be president. He was allowed to assume the presidency only after a governmental reorganization which gave Brazil a parliamentary system in which Congress had all governmental power. As president, but without power or responsibility, Goulart dedicated himself to building his own support, while Congress did little if anything. His radicalism was reflected in his speeches. Supported by other radicals, he did nothing to quiet their agitating, and communist and socialist factions of many kinds multiplied throughout Brazil. Economic nationalism and anti-foreign sentiments were rampant at a time when industrial growth and foreign investments were grinding to a halt. Domestic capital was being sent out of the country. Industrial production and employment were down. The cost of living was soaring, as the laboring classes protested. Shortages of basic goods became commonplace. Inflation was no longer a stimulant to further industrialization; rather, it was a distinct hindrance. The external debt was spiraling. As Goulart and others voiced all the problems and frustrations which the people were facing, his popularity grew. A plebescite in 1963 called for a return to normal presidential government, and Goulart took power.

political crisis

governmental reorganization

He chose highly qualified economists who helped him develop a wide-ranging three-year development plan, covering agriculture, industry, infrastructure, health and education, administrative reform, and resource surveys, all with attention to regional imbalances. Both politically and economically feasible, it could have helped balance Brazilian development. But it did nothing to immediately relieve the urban groups which were staggering under inflation and the rural peasants who were clamoring for land reform. In face of their continued protests, Goulart concentrated less on following the three-year plan and resorted once again to demagoguery.

Attempting to regain popular support and avoid a revolutionary situation at the same time, he did not take the strong stance which was needed to deal with the problems. With no active leadership or program to control the economy or the social problems, these problems grew steadily worse. In addition, Goulart supported radicals within the armed forces, giving the military leadership even more reason to dislike him. When he announced partial agrarian reform and nationalization of the refining and distributing sectors of the petroleum industry, the urban middle class of some of the largest cities revolted. Goulart fled the country in April, 1964.

### military takeover

The combined social, economic, and political crises allowed the military to take control of Brazil. As they began to ponder how to stabilize Brazil and how to begin pursuing balanced development, they decided not to turn the nation over to civilian government again. They chose, instead, to lead and/or push Brazil into a period of steady, secure, self-sustaining development which would result in the country's taking its rightful position as a major nation in the world. To do this in a rapid and organized method, development planning was put in the forefront of all government programs. Economic, social, and political decisions would support the decisions of the planners, and the global economic system would be utilized to furnish the economy with the inputs Brazil could not, at the moment, provide.

### SUMMARY

This section has reviewed the history of Brazil from 1500 until 1964, when the military took control of that nation and began to direct its social, economic, and political development. It has been demonstrated that in the past, many varied global influences have contributed to Brazil's development.

Economically, Brazil has always produced for foreign markets. This affected not only what was produced, but also the infrastructural development and the tendency toward coastal settlement. Brazilian agricultural and mineral commodities were exported, while many needed manufactured products were imported. The means of importing and exporting goods were often dependent on British and, later, American organizations or "know-how." The needs and general well-being of the international markets have been reflected in Brazil's economic position, dependent on foreign demand and competition, and vacillating between "boom" and "bust."

Politically, Brazil received its first colonial structures from Portugal. Even after independence, the empire continued to use European governmental patterns. The establishment of the republic was influenced both by the model of the United States of America and the philosophy of the French Positivists.

Since this time, internal political developments have often reacted to political developments occurring beyond the Brazilian borders.

Culturally and socially, too, Brazil reflects its predominantly European heritage. The language is Portuguese; the main religion is Roman Catholic; the educational structures are basically European; even the dual social structure can be seen as a remnant of the socio-economic patterns first imposed upon Brazil by the Portuguese to establish the plantation economy. The African cultures of the slaves have been an important secondary source of cultural influences. In those areas where slavery was dominant for long periods of time, the African traditions are part of the heritage of all people.

Thus, from the time of its discovery, Brazil has been influenced directly and indirectly by world events and developments. Although many of the influences have been thoroughly absorbed and "Brazilianized," neither their foreign origin nor their importance to subsequent Brazilian events can be denied. In the economic and social developments occurring since 1964 in Brazil, global forces and events continue to influence the direction of Brazil's evolution as will be seen in the following sections.

## Student Activities

Define and discuss the following terms and phrases, relating them to development in Brazil:

- dependence
- role of cities
- moderating power
- "boom and bust" cycle
- development of social classes
- import substitution
- the role of the military in government

Compare the following themes in Brazilian and American history. If you can relate them to development in other nations which you know about, do so as well.

- centralized government
- colonialism
- ex-slaves after abolition
- industrialization
- movement to the interior
- plantation economy
- populism
- regionalism
- slavery as an institution

- the economic development of the Brazilian North-East and the American South
- independence from the mother country

- the gold rush in 17th century Minas Gerais and 19th century California
- the Brazilian interior, as a frontier region, and the American frontier of the second half of the 19th century
- French influence on culture
- English influence on economic development
- the nation as a "melting pot" because of 19th century European immigration
- the development of labor unions in the first quarter of the 20th century
- the great depression of the 1930's
- social programs under Vargas and the New Deal of Roosevelt

The following topics can be researched and discussed, in class or in a paper:

- the treatment of Indians and their influence on life in the modern nation
- the work of the Villa Boas brothers on the Xingu Indian reservation in Goías
- the Baron of Rio Branco, a 19th century Brazilian entrepreneur
- race relations and the concept of race
- Brazil's (especially Bahia's) African heritage, compared with that of the United States

## Additional Readings

Ford, Richard. Tradition and Change in Four Societies. New York: Holt, Rinehart and Winston, Inc.
Unit 2, "Race Relations in Brazil," gives a very good introduction to the subtleties of the Brazilian meanings of the words "race" and "class." Contacts between the Portuguese and indigenous peoples are mentioned, although greatest attention is given to the social and economic status of people of African descent.

Graham, Richard. Britain and the Onset of Modernization in Brazil, 1850-1914. Cambridge, England: The University Press.
A well-written, interesting examination of Great Britain's important contributions to the development of 19th century Brazil.

Manchester, Alan K. British Preeminence in Brazil: Its Rise and Decline. New York: Octagon Books, Inc.
This study looks first at the development of England's influence in Portugal, and then its growing importance in Brazil.

Poppino, Rollie E. *Brazil: The Land and People*, second edition. New York: Oxford University Press.
This book gives an excellent thematic approach to Brazil's history, covering the colonial period through the early 1970's.

Prado Junior, Caio. *The Colonial Background of Modern Brazil*. Berkeley: University of California Press.
A very good, well-translated introduction to colonial Brazil, written by a Brazilian.

Skidmore, Thomas E. *Politics in Brazil, 1930-1964*. New York: Oxford University Press.
This book is concerned with a very important era--that of Brazil's emergence as a modern nation, from Vargas' rise through Goulart's fall. The focus is on both political and economic development.

Stein, Stanley J. and Barbara H. Stein. *The Colonial Heritage of Latin America: Essays on Economic Dependence*. New York: Oxford University Press.
This work gives a very lucid description of the economic development in both the Spanish and the Portuguese colonies. It emphasizes a number of important themes, with separate sections on the periods 1500-1700, 1700-1810, and the 19th century.

Wagley, Charles. *Race and Class in Rural Brazil*. Paris: UNESCO.
This is an examination of race and its relationship with socio-economic status. It gives an interesting presentation of Brazilian nuances of class and race, quite different from United States classifications.

## The Process of Development

economic growth

Economic growth and social development are not synonyms describing the same series of events. Economic growth is more usually measured in terms of rising Gross National Product (GNP) and per capita income. It is also measured in expanding numbers of industrial establishments and employees, increasing amounts of agricultural, mineral, and industrial production for internal and export markets.

social development

development

The concept of social development, on the other hand, can be described as an improved standard of living for those who traditionally have had the lowest levels of living. This is measured in terms of the goods and services which affect people's lives, such as availability of health care and education, adequate nutritious foods, wider distribution of income and consumer goods, and other benefits of economic activity. Although the two processes are focusing on two different goals, each can affect and be affected by the other. Yet the correlation is not necessarily a positive one. If the expanded production of consumer goods or social services is not distributed to improve the lives of people in previously neglected social sectors, then true development has not occurred. When advances do, in fact, occur in both of these two interrelated facets, the result can then be called development.

Rostow's theory

Based on the experiences of the developed nations of the world, Walter Rostow, an economist, has theorized that development is a five-step process:[1]

- First is the starting point, "the traditional society," meaning the subsistence agricultural or hunting and gathering society.

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[1] Walter Rostow, The Process of Economic Growth (2nd ed.; New York: W.W. Norton and Company, Inc., 1962), pp. 307-331.

- Next come the "preconditions for take-off"--evolution of modern science and scientific attitudes; new technology in old fields; a widening market; increased specialization of production; increasing interregional and international dependence; and enlarged financial institutions and increased access to foreign exchange. This stage requires accumulation of capital for infrastructure investments, especially in transport; a technological revolution in agriculture; and an expansion of imports which allow the use of equipment and industrial raw materials which the region could not itself supply.
- Third, the "take-off stage," which usually lasts twenty to thirty years, includes rapid growth in those economic sectors where modern industrial techniques are applied; continued momentum in the three requisites of the preconditions for take-off stage; and usually a social, political, and cultural dominance of modernizers over traditionalists.
- The fourth stage is the "drive to maturity," in which the available range of modern technology is applied to the bulk of the resources; the industrial process is differentiated; there are new leading economic sectors; the structure of the labor force evolves from primarily agricultural and unskilled laborers to semi-skilled and white collar employees; the urban working class has more political power; and professional manaers become increasingly important.
- The fifth and final stage is the "age of high mass consumption" in which the society has to chose one of three alternatives:
  - either the offer of increased security, welfare, and perhaps leisure time to the work force;
  - or the provision of enlarged private consumption on a mass basis;
  - or the seeking of enlarged power for the mature nation on the world scene.

Uneven development can result in the emergence of a dual economy. Within one nation there can be two distinct socioeconomic systems, one traditional and the other developing and modernizing. The traditional sector tends to be in the more isolated rural areas where many of the people have only a marginal subsistence living level and only minimal participation in the money economy. The levels of health and education are very low. Agriculture and industry, if

dual economy

traditional sector

there is any, are labor intensive and archaic. The modern sector is characterized by good transportatinn and communication systems with a relatively large number of capital intensive, highly mechanized industries and farms. The people, on the average, are better educated and healthier, more contemporary in their dress, lifestyles, and aspirations. Most likely the middle class is small but growing and the proletariat is expanding. Generally the modern sector is located in the urban and suburban areas. The very different needs of these two sectors require different responses. More often than not, the modern sector is catered to while response to the extensive needs of the traditional sector is minimal. modern sector

## The Economics of Development

The challenge of development is extremely complex and is influenced by a number of factors. These include:

- the depth of commitment to development on the part of national leaders and decision makers
- availability of capital
- the human and natural resources, as well as the transportation and communication infrastructure of the geographic region which is attempting to develop
- international acceptance (often reflecting the prevailing political climate of the various nations) of the goals and the means taken to reach them by the developing nation

A belief common to the leaders of many developing countries is that if widespread development is to occur, the government--those people and organizational structures which can impose and enforce their will on the citizenry "for the good of the nation"--must become directly and actively involved in the economic activities of the nation. This has happened in China, India, Tanzania, Cuba, and Brazil, and in other nations. In each case, while the underlying economic philosophies are at great variance, the government involvement in the economy is similar. In each case, the economic role of government is seen as quite different from that of government in the United States. While some governments try to lead (or push) their citizens toward Marxist-Leninist Communism or local socialist economies and social systems, others try to evolve indigenous tendencies toward agricultural communal systems. Still others, such as Brazil, hope to emulate the capital intensive, highly mechanized economies of the Western nations. A second generally shared belief of the leaders of industrially-oriented developing countries is that development must be rapid. The centuries-long processes which industrialized the developed nations of the West must somehow be synthesized into a process which will develop a region within a generation.

commitment of decision-makers

If development is to occur in a balanced manner, the commitment of national decision-makers to development is essential. The commitment cannot be only ideological; it must be reflected in the policies, decisions, and expenditures which are made. While development can and often does occur without direct governmental intervention in some areas, the needs of the many developing regions within a nation can be so complex and diverse that uncoordinated attempts to affect positively one social or economic facet may have unexpected negative results in another. For example, if an educational system were expanded, and the additional students were to study the traditionally popular fields rather than those specializations which are needed in an industrializang nation, a country may produce philosophers and lawyers, when it needs engineers and technicians. The result would be underemployed university graduates and a continuing need to hire foreign specialists in many industries. Development priorities must be established in both the social and the economic sectors, and then be supported through legislation, assistance, and investment so desired goals can indeed be reached.

development priorities

Once a government is actively committed to development, and goals and priorities have been agreed upon and established, obtaining sufficient capital for the necessary investments becomes a pivotal problem. Capital must be available for the maintenance and improvement, as well as the expansion, of existing services and facilities in both the social and the economic sectors. There are three main sources for investment capital for national development:

need for capital

sources of capital

- the private sector
- governmental revenues
- extranational sources (governments, international economic and development-oriented agencies, and private foreign banks and corporations.

private sector

In many of the developed countries, the private sector, through investment mechanisms which have developed slowly over the last two hundred years, has made great contributions to economic development. Companies have been established by wealthy individuals or families who had the investment capital and could afford to wait until the company was producing profits for repayment. An alternative is the sale of stock in a company, allowing many people to join together their accumulated resources, until the capital necessary for establishment of a business is amassed. In either of these cases, if the company proves successful, the investors will receive their initial investment plus profits, and the company will be able either to generate or to borrow the monies needed for future improvements or expansions, or stock may be made available to other people who might wish to invest in the now-established business.

In many of the developing nations, however, the private sector has not made comparable contributions to the economy. Entrepreneurial attitudes develop within a society at large only over long periods of time. While wealthy individuals or families may invest in or establish new industries, these can usually contribute only a small portion of the overall industrial needs of a country. Often their industrial interests are focused on a commodity such as cosmetics, evening clothes, color television sets, air conditioning units, or service which is normally for the monied sector or the local elite, and which will not benefit the masses of the people. Many people do not wish to risk their money in speculative fields, but rather in activities with assured returns.

international competition

In many fields of production, locally financed companies are at a great disadvantage when forced to compete with international producers of the same or similar goods. Capital intensive companies, using the latest technological processes to produce for the world market, can produce more cheaply than local companies beginning to produce for local markets, unless the government has established rigorous protective tariffs. The accumulation of investment capital through the sale of stock is often only partially successful. The average person in a developing country does not have money available for investing in stocks, if, in fact, there is some kind of stock exchange in the country. Secondly, many potential investors prefer to have family-run enterprises and do business in a personalized manner, rather than have corporations where the owners are multiple and often unacquainted with one another. Then, too, profits from family enterprises may be transferred to other countries thought to be safer than the home economy. This inability of the domestic private sector to generate the investment capital needed for economic and social growth of the magnitude needed to begin to evenly develop a nation has caused many governments to take an active role in the development of basic social services.

Governments, also, are limited in the amount of capital they have available for investing in these two spheres. Governments get their revenues through taxation of corporations, landholdings, individuals, sale of luxury items, etc; tariffs on imports and exports; borrowing from within or without the nation; direct aid or grants from foreign governments or organizations; fees for services (issuing documents, permits, licenses, etc.); and from direct profits of economic activities in which they are involved. Attempts to solve financial problems by simply printing more money without backing leads to inflation. Although this can serve as a stimulant to the economy, it can easily get out of control and defeat its purpose if the money is devaluated nationally and internationally.

capital accumulation

Capital accumulation from national sources, especially from taxation and borrowing, depends to a great extent on the revnues generated within the economy. A strong economy which involves a large portion of the population in the money economy allows a government to collect increasing amounts of money through taxation of both corporate profits and individual incomes. In countries whose economic policies are such that the monies in savings accounts earn enough interest to keep apace of inflation, people who earn more money than they need for subsistence can be encouraged to deposit some portion of their surplus income in savings institutions which in turn lend the money. Thus, more money is available for the government or for members of the private sector to borrow and invest. If interest does not keep pace with inflation, many people will try to change their savings into the "hard currencies" of foreign countries, or buy goods with intrinsic value which can be resold when cash is needed, rather than save money in banks where its real value decreases. Both alternatives withdraw savings from domestic investment.

extranational sources of capital

Extranational sources of capital include foreign government offices (i.e. U.S. AID), international government groups (i.e. many of the U.N. organizations, World Bank, and Inter-American Development Bank), and private multinational firms (banks, industries, etc.), as well as foundations and private voluntary agencies. These can play an important role in the development of some aspects of a nation's economy because they can furnish capital which does not have to be initially generated within the existing economy. There are five basic categories of aid which can be offered: private investment, grants and loans, tied aid, surplus commodity sales, and technical assistance.

multinational corporations

Private investments are made with the expectation of securing a profitable return to the investor. In the nations whose governments allow foreign investment in various facets of the economy, multinational corporations (MNCs) are often willing to establish industrial concerns, either unilaterally or in joint ventures, if they feel that it is reasonable to believe that the new establishment can become profitable and will not be nationalized.[3] These may consist of factories, complete with modern technology, specialists in many phases of industrial production ranging from plant planning and management to marketing, with established linkages in the national and international markets. Or the foreign company may simply sell patent license contracts, know-how contracts, technical assistance contracts, or distribution contracts, to be paid for by either fees, royalties, or a share in the profits.

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[3] To the investor, nationalization signifies not only the loss of control over his establishment and the loss of future profits, but also the very real possibility of receiving payment which only partially reimburses the total investment in or the current value of the establishment.

Multinational involvement often occurs when neither the private nor the governmental sector has the capital or the know-how to establish an industry whose products are seen as necessary within the nation and are being imported when they could be produced within the nation. But the developing countries, while wanting the investments of specific MNCs, also want to place some limitations on the operations of those industries to maximize the benefits to the host nation, rather than simply become another way for the MNC to increase its profits. The benefits to the host nation can include payment of local wages and salaries, taxes, and interest and dividends to local investors, as well as the purchase of locally produced raw materials and supplies. All these activities put more money into the national economy.

The establishment of new industries often means that other investments will be made in complementary fields to facilitate supplying or servicing the major new industry. Depending upon the degree of need for an industry within the developing nations and upon the degree of desire on the part of the MNC to locate a branch within that same nation, contracts are made in which both sides compromise--i.e. on the number of nationals in administrative positions or on the payroll. They also compromise on the percentage of ownership which must be in the hands of nationals, the percentage of parts which must be produced within the country versus those which can be imported for assembly, and the amount of profit which can be taken directly out of the country, etc.--yet it is expected that both the nation and the corporation will receive acceptable benefits.

grants and loans

Grants and loans are made to developing nations with the the expectation of repayment with interest. Private multinational banks (such as Citibank and Chase Manhattan) and international banks (such as the International Bank for Reconstruction and Development [World Bank] and the International Development Bank) will make loans provided the political and economic risks are thought acceptable. More often than not, these grants or loans are made for specific projects, the plans for which must be submitted in advance. Occasionally, loans are made so that other loans may be repaid. All these monies, of course, have to be repaid with interest. It is expected, however, that, if these monies are invested properly, the economy should generate the revenues necessary for their repayment, after a period of grace. Future revenues can then remain within the national economy. On occasion, the debts cannot be repaid on time, requiring the rescheduling of debt payments--in effect a new loan.

foreign aid

The governments of many developed nations and associations of nations are interested in assisting foreign countries as they confront the development process. Here, the ideological compatibility of the borrower and lender nations is an important consideration, as well as the lender nation's political and/or economic aspirations in the region of the borrower nation. Because of political realities, communist countries tend to assist developing communist countries or those with communist leanings; capitalist countries tend to assist countries with capitalist economies; and in regions where the ideological set of the leaders is malleable, both communist and capitalist countries often vie to give aid. Aid may be in the form of loans, which may or may not be "tied aid," meaning that goods and services funded by the loan will be provided by the aiding nation. Aid may be the sale of surplus commodities, such as United States aid to India in the form of wheat, which would have cost vast amounts of money to store until other consumers were found. Aid may also come in the form of technical specialists assigned to specific projects within the overall development plan, such as agriculture or highway construction, or in the form of volunteers trained for active roles in fields such as health, education, literacy training, agricultural extension work, etc. The United States Agency for International Development (U.S. AID) and the Peace Corps are two American examples of technical assistance available to developing nations.

political compatibility

private voluntary agencies

Also, many international and private non-profit groups are interested in assisting the less developed regions of the world, whether in developed or underdeveloped nations. Many are interested in rapid improvements in basic social welfare and give services in the fields of health and nutrition or in local agricultural development projects. Overseas church projects, CARE, Inc., World Neighbors, OXFAM, and many others contribute to social betterment around the world, as do philanthropic foundations.

investment priorities

Once capital is available for investment, the governments use it in accordance with their priorities. Governments invest, to one degree or another, in both the economic and the social spheres--in the economic sphere where a definite need exists, but which lacks sufficient private funding, and in the social sphere to render long-term returns in the form of a healthier, better educated populace, able to contribute to the nation's future growth in an increasingly productive fashion. So with its spending, the government must attempt to stimulate the economy; to produce revenues for governmental repayment of loans (debt servicing), for savings (capital base), to pay for its own operating expenses, for reinvestment in established activities in both the social and economic spheres; for new investments in those two spheres; and to care for the citizenry so that minimum standards of welfare are achieved.

infrastructural investments

A third type of investment, of prime importance and usually the responsibility of the government is that of building infrastructure--roads and highways, communications facilities, ports, public utilities, etc. These investments give long-term indirect returns in both the economic and the social spheres. Transportation costs from one region to another may be reduced. The economic potential of previously unreachable regions may be achieved when there is access to markets, resulting in full employment in the region. New products and ideas, as well as comforts such as street lighting, can reach isolated areas. Energy-intensive industries, such as aluminum refining, may be started. These projects involve vast amounts of money with very little hope for short-term repayment of costs, although the indirect benefits can be of great value.

resources

Both human and natural resources must be available if development is to occur. Human resources provide the labor force and the technicians for industry, government, social services, and food production. Human resources also include the consumers of at least a portion of what the nation produces. Natural resources are a direct source of income, if they are exported, and of the raw materials needed for industrial and agricultural expansion. Any nation which wishes to develop industrially will need fuels, steel, cement, and a large variety of minerals which are of industrial importance. Agricultural development, too, requires water and good soils. Because it is a basic ingredient of fuels, lubricants, plastics, fertilizers, and other products indispensable to industry and agriculture, petroleum is a mineral of prime importance. However, the rising cost of this source of energy for many of the developing nations has hampered development since 1973. Overall, the more natural resources a nation has within its territory, the lesser amounts of capital it will have to use for buying raw materials from other sources to service its growth. The more technicians and specialists, as well as skilled and semi-skilled laborers a nation has, the less it will have to depend on foreign technicians.

spatial distribution

The location of resources within a nation in relation to transportation routes, power sources, and population centers also has an effect on development. Spatial adjustments, changes in the location or distribution of population and of economic activities, may be necessary. This can include programs to relocate people into sparsely populated regions which have resources to be exploited, or programs to foster economic activities in regions which have large underemployed populations. Failure to make spatial adjustments can undermine the development process, and spatial changes should be matters of planning.

international acceptance

National development does not occur in isolation from the rest of the world. If the goals and methods of a nation's development strategies in political, economic, and/or humanitarian terms are acceptable and not threatening to the international community with which it must interact, or to a major segment thereof, the possibility of reaching the goals is enhanced. Extranational banks, governments, and industries can play an important role in the direct or indirect financing of economic expansion when neither the private nor the governmental sectors can generate the needed investment capital.

The international community also provides markets for the raw materials and agricultural goods which are the mainstay of the economies of many developing nations. The availability of these markets assures a basic income for the government and continued employment of the people involved in the production of these prime goods which the domestic markets might not be able to absorb. The sale of exports also provides foreign credits to pay for imports. Trade can, as a rule, be facilitated if there is political and/or philosophical agreement between the developing nation and the international community which, in whole or in segments,[4] sponsors its growth.

commodities cartels

Potential commodities regulation by cartels, in which producing nations regulate the production, pricing, and marketing of all members of the group, is gaining increasing attention. As a means of maintaining or raising prices which the international community must pay, such an arrangement modifies the extreme price fluctuations which can wreak havoc on the economies of commodities producing nations. The outstanding example of this type of cartel is OPEC, although there are many less-powerful cartels which organize the producers of other commodities such as coffee and cocoa. Although in many ways a feasible position for commodity producing nations to take, a number of pitfalls must be avoided for a cartel to be successful. For most products, a drastic price rise will either encourage overproduction which may glut the market and cause prices to fall or cause consumer nations to look seriously for substitutes. Many commodities, unlike oil, can easily and inexpensively be stockpiled in the user nations. For many commodities, price rises would make production practical in those nations which have reserves but which currently find it either uneconomic to develop them or less expensive to import them. Yet other consumer nations may find it worthwhile to recycle the commodities, lessening their dependence on imports. In cases where commodities come from nations with radically different political ideologies, it is doubtful that those countries will be able to cooperate for a very long period of time. These difficulties impede the formation of cartels of long-term duration, but do not eliminate the possibilities for creation of short-term arrangements which would temporarily increase the incomes of producer nations.[5]

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[4] For example, the Western nations, the Communist bloc, the European Economic Community (EEC), the Organization of Petroleum Exporting Countries (OPEC), the Latin American Free Trade Association (LAFTA).

external
markets

For nations attempting to expand the industrial sector of their economies, but with small internal markets either because of a small population or because large segments of the population are effectively outside the money economy and therefore do not buy manufactured products, the external markets have the potential of absorbing industrial production. This depends upon acceptable trade agreements on tariff rates being established between the nations involved regarding the specific products. While feasible in principle, nations are often reluctant to do this when it means importing products which can effectively compete with domestic industries.

Just as international approval and positive relationships can improve (although not guarantee) a developing nation's chances of reaching its goals, nations or groups of nations can also express dissatisfaction with the goals and means of development of a nation. The most extreme reaction is military intervention, such as the Russian invasion of Czechoslovakia in 1968. Indirectly, foreign nations may support and/or finance opposition forces or revolutionary factions within a nation, such as the United States treatment of Chile during the Allende regime.

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[5] See Sanford Rose's "Third World 'Commodity Power' Is a Costly Illusion," Fortune, November, 1976, p. 147.

boycott

A less extreme way of expressing dissatisfaction is through boycott, in which one or many nations may refuse to deal economically with another. An effective boycott can result in unemployment in the sector which produces for export, with resultant lowered revenues for the government from both taxes and tariffs. The more important the export sector is in relation to the other sectors of the economy of a boycotted nation, the more damaging the boycott can be if alternate markets cannot be found. Since both economic and social development require large investments, the lowered governmental income may seriously hamper governmental activities and eventually force new policies which are more acceptable to the boycotting nations. Examples of international dissatisfaction involving single nations and/or associations of nations of varying types include the United Nations-declared boycott of Rhodesian chrome, the Organization of American States' boycott of Cuba after 1960, and the Arab nations' activities regarding Israel and the nations which deal with Israel.

international
context of
development

While the assurance of investment capital for specifically needed projects is a major component in the development of a nation, it is not enough. At best, the developing nation that is internally prepared--with many resources, good infrastructural supports, trained personnel, honest and skilled administrators and bureaucrats--still must function within the delicate balance of the international context. A major change in that context--a fall in commodity prices, the collapse of a vital market, a drastic rise in the price of petroleum, an international recession or depression, a change in internal government--can disrupt major portions of the developing nation's economy. In the case of Brazil, at several times during its history, the economy appeared strong and capable of continual progress and expanded opportunities, yet the growth cycles collapsed as the international context changed.

## Economic Development in Brazil

"boom
and bust"

commodity
exports

As seen in the section which introduced Brazilian history, Brazil's economic history has consisted of a series of regional booms and busts--periods of economic security, prosperity, and expansion, followed by periods of depression. For most of its history, the Brazilian economy has centered around the production of a few tropical or semitropical agricultural commodities and their sale on the world market. Dyewoods, sugar, cotton, rubber, and coffee have all, at one time or another, been vital to the economy. In each case, Brazil had a virtual monopoly on production, while world demand pushed prices ever higher, giving Brazil extended periods of prosperity. In every case, competitors eventually broke into the world market and either forced Brazil out or lowered prices substantially, leading to economic depression and a search for new high-demand commodities.

international competition

While the beginnings of Brazilian industrialization date back well over a century, it has only been since the 1930's that the Brazilian government has become seriously concerned with the industrial sector of the economy; until then, it had been regarded as a minor, complementary activity to the important agricultural sector. The Great Depression of the 1930's and World War II both stimulated industrial growth in Brazil. The American and European nations upon which Brazil depended for many consumer goods were no longer focusing on the industrial production of consumer goods for export. Brazilians had to produce the goods which they needed themselves, or do without, and the import-substitution phase of industrial expansion began.

government involvement with industry

import substitution

In the post-war era, Brazil's economic production grew steadily, until the early 1960's. During this time, the industrial sector, which was given prime importance, steadily outpaced the agricultural sector. The economic growth contributed to rising standards of living for the many people who were involved in the modern sector of the economy and induced increasing numbers of rural Brazilians to move to the industrial centers. But growth was also accompanied by steadily rising inflation.

In the early 1960's, however, the economic growth and expansion suddenly slowed down. This event was judged in retrospect as having been caused by Brazil's having expended the possibilities of import-substitution industrialization. Both socially and economically, Brazil became increasingly chaotic. There was increasing unemployment, flight of domestic capital, threats of revolution, spiraling inflation, shortage of foreign reserves, a drastic cutback in economic investments from overseas, peasant movements demanding agrarian reform, growing nationalism manifested as xenophobia, increasing income disparities between the traditional economic sectors, and mounting governmental instability and crises.

In 1964, in response to the deteriorating situation, and taking advantage of an urban revolt, the military deposed the elected president and established a new regime. It was supported by the modern, urban "middle class" and the industrial elite who had been most threatened by the leftist rhetoric and who had the most to lose if the social and economic trends had continued. While the immediate reason for the imposition of military rule was to avoid a complete

1964 military takeover

national collapse, a number of other factors supported the decision. Since the late 19th century, the military had traditionally intervened in national politics when it felt the need to do so, and several times prior to 1964, the military had imposed its will on the civilian government. Secondly, the military leaders saw themselves as a group which knew Brazil and its problems well; they came from all parts of the nation, (although predominantly from the south) and had been stationed in various areas throughout the country. This reinforced their belief that they had a national, rather than regional, perspective about Brazil. Thirdly, the military leadership, although not the younger officers or conscripted forces, was a bastion of commitment to Western capitalistc economic ideology. It reacted against the increasingly radical shift in the national position. The military wanted to see Brazil develop and become a leading power in the world on the Western model.

initial actions

The initial actions undertaken by the military regime were those thought necessary to impose order, first in the social and political spheres, and then in the economic sphere. The new regime was faced with numerous crises, and priorities for action had to be established. A first step was the immediate silencing of various opposition forces through removal from political office, imprisonment, exile, deprivation of rights, censorship, etc. The military leaders seemed to feel that at a time of national emergency requiring rapid, decisive governmental action, the democratic processes of reconciling divergent opinions would be too time-consuming. (That military officers are accustomed to giving orders and seeing them followed without question no doubt was also an important factor.) In addition, many Brazilians themselves have characterized the Brazilian electorate as uneducated, unsophisticated, overly emotional, drawn to demagogues and their promises, and therefore incapable of making the kinds of serious decisions required. Since 1964, the government has continued to make many decisions for the Brazilian population.

Rather than return government to civilian authorities as had been done following past interventions, the military authorities named a high-ranking career army officer, General Humberto Castello Branco, as President. Since the military takeover, the division between the leaders of the armed forces and leaders in government has become increasingly tenuous. Decisions concerning the nation are made by the National Security Council, composed of the President, Vice President, the Ministers of State (often military officers), and the Chiefs of Staff of the Armed Forces. While the initial government reorganization was occurring, the President ruled by decree.

The federal government has gradually but steadily centralized its authority over the states which, along with local government, are increasingly dependent on the national authority.

governmental reorganization

Since 1889, state and local governments had power only in those facets in which the federal government declined to involve itself. After 1964 the political party system was reorganized, allowing one government party (ARENA) and one moderate, nominal opposition party (MDB). Governors are elected indirectly, and they in turn appoint the mayors of major cities. Congressional representation was changed from dependence on the total population to the numbers of registered voters. This move shifted power from the North-East to the South and South-East. In 1970, about half of the potential electorate was barred from voting because of illiteracy. The federal government has the power to remove elected legislators, governors, or mayors whose actions do not complement its decisions.

growth of executive branch

Powers of the executive branch of the federal government were greatly enlarged under the military regime. With time, Congress was relegated to a secondary role in which it approves recommendations, appointments, legislation, or decisions issued by the executive branch. In fact, in 1968, the Congress was suspended for several months for refusing to waiver congressional immunity for one of its members who had criticized the military. The judiciary also was weakened as trials relating to subversion and public security were put under the authority of military courts. Meanwhile, even though the executive also gained power to issue Institutional Acts which supercede the Brazilian Constitution, a new one was issued in 1967 and later substantially revised in 1969. The role of the Constitution in Brazilian politics has been described as "a juridical statement of intent" and not "a political document of relevance to the governance of Brazil."[6]

National Ministry of Planning

need for economic growth

Once some semblance of socio-political calm began to emerge, the president, Castello Branco, assembled a body of economic advisors, selected from leaders in industry, commerce, education, and governmental economic bodies to study Brazil's economic problems and to formulate strategies to resolve them. The National Ministry of Planning, formed out of this group, gave attention to the resumption of rapid economic growth, believed essential to generate capital which could further expand the economy. Eventually the expanded economy would permit investment in social services and the creation of opportunities to bring the traditional masses of the population into the modern sector. But the national and international economic factors of development were considered top priority and therefore received the bulk of official attention and assistance.

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[6] Riordan Roett, Brazil in the Sixties (Nashville: Vanderbilt University Press, 1972), p. 145.

international reputation as democracy

The 1965 revolution in the Dominican Republic gave the Brazilian military an opportunity to reestablish its international reputation and to demonstrate solidarity with the United States and other Western powers. This was an opportunity to show the world that the radical thought and action of pre-coup Brazil had been completely eliminated from post-coup Brazil. At the request of the Organization of American States, Brazil sent army occupation units to Santo Domingo, and the commander-in-chief of the combined OAS forces was Brazilian. This active role in combating the revolt has also been seen as an indication to other Latin American nations that Brazil was asserting itself as a leader in the Americas and not just a follower of United States initiatives.

economic reform

Within Brazil, the first three years of military rule were characterized as "a period of intense and hectic activity on the part of the government planners...(and) a period of austerity and stagnation for the Brazilian economy."[7] The monetary inflation which had accompanied the economic growth of the 1950's and outpaced it during the 1960's (144% during the first three months of 1964), was based on deficit spending by past governments, easy credits for industry, loans with negative real interest, high export duties, subsidies and price supports for a number of products and services. It became the target of the economic reforms of the Castello Branco government (1964-1967). The policy-makers sought strategies to check the inflationary spiral, to provide investment capital for necessary public sector investments, to repay loans to international creditors, and to provide a healthier investment climate, which would attract private capital from both Brazil and abroad, to stimulate the economy. The government curtailed credit, sharply reduced imports, and removed subsidies from several consumer items. All of this was designed to allow the distortions of the economy to equilibrate through the process of supply and demand, tempered by the limited availability of money. While the economy was equilibrating, however, the real wages of several of the income-earning sectors of the labor force were falling.

opposition to regime

Even as the overall economic situation was beginning to stabilize and the second military president, Arthur da Costa e Silva, was taking power, overt opposition to the military regime was becoming manifest. Immediately following the revolution, the Catholic Church had been the only institution with enough influence, power, and independent resources to comment critically upon the actions of the regime. Archbishop Helder Camara of Recife has been one of the most outspoken members of the clergy, and he has drawn international attention to many of the imbalances within Brazil.

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[7] Donald E. Syvrud, Foundations of Brazilian Economic Growth (Stanford, California: Hoover Institution Press, Stanford University, 1974), p. 34.

Although many people who would have been critically outspoken about the regime had been jailed or exiled in 1964, by the end of 1967 radical university students and some members of outlawed political groups had organized themselves into a number of illegal opposition forces. As had often occurred in the past, in this radical opposition movement there was no cooperation or coordination in goals or in actions. By the end of 1968, university student opposition, which usually consisted of vocal criticism of the regime, had been quashed, and government intervention in schools and colleges, in both classrooms and political activities, became more pronounced. Urban guerrilla warfare by other factions continued through 1970. Bank robberies, public bombings, and kidnappings of foreign dignitaries for prisoner exchange proved a threat to stability. But these actions, theoretically designed to show the Brazilian people that the military could be successfully opposed, did not lead to open rebellion, and the terrorists were effectively suppressed by the end of 1970, at which time some 12,000 political prisoners were in jail.[8]

Fifth Institutional Act

Part of the reason that the government was able to surmount this insurrection was the 1968 issuance of the Fifth Institutional Act, which gave the government unlimited powers of arrest and detention, with no rights of habeas corpus (still in effect). Used in conjunction with the (1969) constitutional power of the president to declare state of siege to deal with emergencies in internal affairs, it expanded the government's power. In the late 1960's, documented cases of torture of radicals and their associates by military and police forces became more widespread, as these methods gained acceptance as a way of combating terrorists. (Later, torture spread to use on criminals who have no political involvement, in spite of periodic investigations and announcements that such actions will no longer occur.) In some regions of Brazil, independent "death squads" became active, and it became common for suspected opponents of the regime, as well as common criminals, to simply disappear.

torture

death squads

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[8] Brady Tyson, "Brazil: Nine Years of Military Tutelage," Worldview, July, 1973, p. 30.

In 1969, Costa e Silva, who had been president since 1967, was disabled by a stroke. The civilian vice president was declared ineligible to serve as president, and the executeve position was filled by an interim executive council of the ministers of the three military branches until elections could be held. The process for selecting ARENA's presidential candidate is not fully known, although it does seem to involve polling the military leaders of the three branches of the armed forces. There is also evidence that within the military leadership it is necessary to compromise between two factions--a "hard line" favoring continuing strict military leadership for an indefinite period of time, and a "soft line" which favors a return to civilian government and more civic freedoms for the population. As a result of the terrorism and civil disorder of the late 1960's, the hardliners were very influential in selecting the candidate, General Emilio Médici, who was elected by the reconvened Congress to a five year term ending in 1974.

military
hard line

military
soft line

While social and political peace was being pursued to allow government policies to take effect without opposition, economic development initiatives were also being structured. The post-1965 governments have seen the role of the state as "giving the private sector appropriate policy guidance, investment opportunities, tax curbs on its avariciousness, and an adequate infrastructure of power, fuels, transportation, and basic industries to support an expanding economy."[9] In addition, the government has invested in vital sectors which were unattractive to private investors because of high risks or of long-term or indirect returns. It has tried to attract private capital to those aspects of the economy whch yield relatively short-term returns--agriculture, manufacturing, mining, and raw materials processing. However, if the government deems any industries essential, then it has not hesitated to invest in these when private capital is not forthcoming.

role of
state in
economy

Initially, most sources of private capital were unwilling to invest in Brazil's very unstable economy. To obtain some of the capital needed for public sector investments from national sources, one of the first decisions was to revise both personal and corporate income tax structures, not only raising the rates, but also collecting the monies more efficiently and enforcing stiff penalties for income tax evasion, which had been a not-uncommon occurrence in the past. With the more efficient taxation mechanisms, the number of people paying taxes rose by some 500%, and actual receipts

sources of
capital

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[9] Rollie E. Poppino, Brazil: The Land and People (2nd ed.; New York: Oxford University Press, 1973), p. 282.

rose even more. At the same time, the new taxation laws gave special favors to the exporters of industrial products, and "each firm was allowed to cancel up to half its annual income tax if it invested a comparable amount in one of the underdeveloped regions of Brazil."[10] Later, deposits in regional development banks also became tax credits.

economic planning

While the economy was still based on the capitalistic system, expanding state participation was evident in key sectors. Under military leadership, technocrats (highly trained scientific and economic planners and managers) rose to a new level of importance in Brazil. Long and short range development plans were issued by both national and regional planning agencies. The emphasis continued to be on those projects which were basic to further economic development and which would eventually have a positive effect on the lives of most Brazilians. Most plans did contain some strategies to improve social conditions, but these were secondary, rather than primary features of these first planning attempts. At least equally important to this sound development planning, however, was the availability of capital to follow through on the plans decided upon. The economic measures which were begun by 1965 did produce an attractive investment climate, especially for foreign capital. New banking institutions focusing on development projects were formed, while the entire banking structure was reorganized.

investment climate

By 1967, Brazil's international credit rating was climbing. Foreign loans, usually made directly to the national government institutions, expanded, and by 1971, the foreign debt had grown to some $3.3 billion from $700 million in 1967. This included United States assistance, which, having halted before the revolution, averaged some $450 million annually from 1964 to 1971. (It included about one fourth of all military assistance sent to Latin America during that period.)[11] The stock market was restructured to encourage the growth of privately owned firms.

The Brazilian government's decision to invest in infrastructure and basic industries necessitated this large and continued influx of foreign capital, because the national economy itself had no way to quickly generate revenues of the magnitude needed. At the same time, the planners felt that these activities were so directly related to future economic development that they could not be delayed.

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[10] Ibid., pp. 282-284.

[11] Elizabeth Farnsworth and Nancy Stein, "Brazil Leaves Our Orbit," The Nation, March 13, 1976, p. 295.

infrastructural investments

By 1972, the transportation infrastructure was first on the list of public expenditures. A number of new highways were begun, and others, including the Belém-Brasília, the coastal route from Rio de Janeiro to Salvador, the Trans-Amazon, and others in the Central-West were completed, opening up new parts of the interior to colonization and providing routes between potential extractive, agricultural, and industrial activities and major marketing centers. Between 1964 and 1973, the amount of paved highway grew by 250%, but this was still only a small portion of the extant roadway. The railway system, never very extensive, was reorganized and modernized; little-used, uneconomical routes were eliminated while new routes were being planned. A program for modernizing the major ports of the Atlantic coast to allow them to handle more and bigger ships was begun.

electricity

In that same 1964-1973 period, hydroelectric power generation doubled, and more plants, in various regions of Brazil were under construction. Besides supplying additional towns with power, electrification allows industrial development in new regions. During this period, Brazilian industries were using over half of all electricity generated. Brazil also entered into a highly controversial contract with West Germany for the technology, design, and construction of several nuclear generating stations, also giving Brazil the potential of building atomic bombs. Telecommunications were modernized, allowing better communications within Brazil and with the rest of the world. Basic industries, many of which were dominated by governmental companies, expanded production of steel, cement, oil, and petrochemicals.

"Brazilian Miracle"

From 1968 through 1973, when the international oil crisis negatively affected Brazil's industrialization program and the nation's international balance of payments, Brazilian economic production was expanding at an average of some 10% annually. The industrial sector alone averaged around 15% yearly growth. The expansion of manufacturing reflects the economic decisions made by the technocrats of the National Ministry of Planning, to export manufactures. As Brazil was stabilizing, private capital investments in industry were courted, and multinational corporations were advised that they were most welcome to operate in Brazil.

multinational

Manufacturing, as an activity which in a relatively short span of time begins to yield returns, is preferred by many investors to other activities. Because of their technology, experience, international marketing systems, and financial resources, MNCs can compete successfully against small-scale, local industries, especially in the production of durable consumer goods and most capital equipment. Not surprisingly, MNCs based in many nations, including the United States, Japan, Germany, France, Italy, Switzerland, and the Netherlands, have expanded their Brazilian investments and production. Either through subsidiary companies or joint ventures with local industrialists, and occasionally with the Brazilian government, MNCs are major producers in many facets of industry. In the early 1970's, foreign investments were involved in 90% of the production of cars and trucks, 72% of the machinery and equipment industry, 61% of the electrical and communications equipment industry, 94% of the tobacco industry and 81% of the rubber industry.[12]

In those industries which are relatively labor-intensive, such as textiles and leather goods, local industries have been competitive, and MNCs rarely enter these fields. The Brazilian government, in addition, has encouraged the merger of competing Brazilian companies into larger production units. Smaller, noncompetitive national industries have been allowed to go bankrupt, rather than involve the government in deficit financing. Commercial agricultural production and food processing, which also expanded during this period, were also dominated by Brazilian ownership.

production
for external
markets

Since the internal market for most manufactures was still limited to a small portion of the total population, manufacturing could be expanded only when new markets were found. Although the domestic market could multiply several times before expending its consumptive potential, this would necessitate massive redistribution of wealth within Brazil, to give the neediest people money with which to buy manufactures. Because of the difficulty in doing this, the decision was made to promote the export of industrial products, as well as the traditional commodities, thereby allowing growth of industrial production without waiting for the expansion of the domestic market. Besides promoting employment, this helped Brazil's total exports achieve a more equal value to that of the needed imports. Trade missions were sent to Europe, to Africa, especially to those nations which had been colonized by Portugal, and those which export petroleum, and to Asia. New markets for Brazilian manufactures were established, and as all exports grew, the proportion of manufactures in exports, still dominated by commodities, was expanded. (See Chart I)

As previously mentioned, the new taxation policies and banking structures were designed to channel new monies into those regions which are the poorest and the least economically

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[12] Commissariado do Brasil Export 73-Trade Fair. Brasil Today, (São Paulo: Editora Banas S.A., 1973), p. 46.

Chart I. Value of Exports (Millions of U.S. Dollars) and Percentage of Exports

| | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 |
|---|---|---|---|---|---|---|
| Agriculture, livestock, forestry, & fishing | | | | | | |
| raw sugar | $126.5- 4.6% | $146.6- 5.0% | $314.1- 7.9% | $454.9- 7.3% | $978.3-12.3% | $769.9- 8.9% |
| soybeans | 70.7- 2.6 | 105.8- 3.6 | 280.3- 7.0 | 916.8-15.8 | 889.3-11.2 | 1149.8-13.3 |
| coffee | 939.3-34.3 | 772.5-26.6 | 989.2-24.8 | 1244.3-20.1 | 864.3-10.9 | 852.2- 9.9 |
| cocoa | 77.7- 2.8 | 61.7- 2.1 | 59.2- 1.5 | 88.5- 1.4 | 210.0- 2.6 | 220.4- 2.6 |
| corn | 80.6- 2.9 | 75.4- 2.6 | 9.6- .2 | 3.1- * | 139.0- 1.7 | 150.8- 1.7 |
| tobacco | 31.2- 1.1 | 36.6- 1.3 | 46.7- 1.2 | 58.5- .9 | 99.0- 1.2 | 141.8- 1.6 |
| cotton | 158.2- 5.7 | 139.9- 4.8 | 190.5- 4.8 | 219.6- 3.5 | 92.4- 1.2 | 98.1- 1.1 |
| meat | 77.9- 2.8 | 111.6- 3.8 | 191.1- 4.8 | 192.6- 3.1 | 69.1- .9 | 48.7- .6 |
| other | 230.6- 8.4 | 242.7- 8.4 | 291.1- 7.3 | 436.4- 7.0 | 564.4- 7.1 | 495.0- 5.7 |
| Total | 1792.7-65.5 | 1692.8-58.3 | 2371.8-59.4 | 2614.7-58.3 | 3905.8-49.1 | 3926.7-45.4 |
| Mining | | | | | | |
| iron ore | 209.6- 7.7 | 237.3- 8.2 | 231.7- 5.8 | 362.8- 5.9 | 571.2- 7.2 | 908.8-10.5 |
| manganese ore | 30.6- 1.1 | 37.7- 1.3 | 27.3- .7 | 18.9- .3 | 49.7- .6 | 81.0- .9 |
| other | 38.8- 1.4 | 35.4- 1.2 | 53.8- 1.3 | 74.3- 1.2 | 93.0- 1.2 | 161.4- 1.9 |
| Total | 279.0-10.2 | 310.4-10.7 | 312.8- 7.8 | 456.0- 7.4 | 713.9- 9.0 | 1151.2-13.3 |
| Manufactured goods | | | | | | |
| machinery | 69.0- 2.5 | 94.5- 3.3 | 124.9- 3.1 | 197.3- 3.2 | 430.0- 5.4 | 528.8- 6.1 |
| crystal & refined sugar | .1- * | 6.4- .2 | 89.4- 2.2 | 103.8- 1.7 | 343.6- 4.3 | 329.8- 3.8 |
| processed foods | 73.1- 2.7 | 136.5- 4.7 | 160.0- 4.0 | 233.4- 3.8 | 256.2- 3.2 | 232.5- 2.7 |
| vegetable oils | 63.7- 2.3 | 76.8- 2.6 | 109.2- 2.7 | 196.5- 3.2 | 239.5- 3.0 | 263.9- 3.0 |
| vehicles | 14.9- .5 | 24.9- .8 | 68.6- 1.7 | 76.2- 1.2 | 186.5- 2.3 | 316.9- 3.7 |
| shoes | 8.3- .3 | 29.3- 1.0 | 54.6- 1.4 | 93.5- 1.5 | 120.3- 1.5 | 165.1- 1.9 |
| steel products | 41.1- 1.5 | 29.5- 1.0 | 52.3- 1.3 | 52.9- .8 | 72.5- .9 | 69.5- .8 |
| other | 372.3-13.6 | 409.2-14.1 | 602.7-15.1 | 1013.7-16.4 | 1488.1-18.7 | 1462.2-16.9 |
| Total | 642.5-23.5 | 807.1-27.8 | 1261.7-31.6 | 1967.3-31.7 | 3136.7-39.5 | 3368.7-38.9 |
| Other exports | 24.7- .9 | 93.6- 3.2 | 44.9- 1.1 | 161.2- 2.6 | 194.6- 2.4 | 208.6- 2.4 |
| | $2738.9 | $2903.9 | $3991.2 | $6199.2 | $7951.0 | $8655.2 |

* indicates less than 1/10 of 1%

Mario Henrique Simonsen, Minister of Finance, Federative Republic of Brazil, Prospectus for External Bonds Due 1981, dated May 12, 1976, p. 26.

productive. This attempt to decentralize the economic concentration of the South-East and South has not been totally successful. The industries established have often been for parts assembly, rather than for production and assembly which could stimulate complementary industrialization in those regions. The South-East and South, and expecially São Paulo, continue to increase their lead in industrial production.

regional planning agencies

The regional planning agencies have been active, not only in the establishment of economic activities, but in many fields of social improvement, and their work is complementary to the designs of the federal government. In part, the projects they design are financed by loans from regional development banks which, in turn, are supported by the federal policies.

SUDENE

SUDENE, established in the late 1950's is probably the best known and most successful of the regional planning agencies in Brazil. Active in the North-East, it has had more success in providing infrastructural supports--in power, transportation, and education--than in promoting agricultural development. The economic activities established under SUDENE's direction have contributed to regional growth, but the constant problem of providing enough jobs to keep pace with the growth of the regional population remains. In spite of the many accomplishments made throughout the late 1960's, the development policies tended to favor the areas around Salvador, Recife, and Fortaleza, just as the national development policies tend to favor the more advanced regions of the country. Originally a very strong and autonomous development agency, SUDENE's power has been eroding for a decade because of political interference and the growth of other development institutions. Under the new taxation laws, in which corporations can divert a certain portion of their taxes into investments in the North-East, SUDENE has the responsibility of directing these monies, although this must be done in accordance with decisions issued in Brasília. When the fourth five-year plan was issued for the period 1969-1973, attention was given to more balanced intraregional development, by emphasizing the needs of the poorest regions within the North-East.

SUDAM

SUDAM, similar in purpose and operation to SUDENE, focuses on the development of the North, the Amazon region. Its main interests are in improving cultivation, livestock raising, and manufacturing. A specific aim is to utilize the resources of the rain forest by developing the pulp and paper industry, heretofore dominated by the production in the South. This agency, too, has focused most of its attention on the two main cities, Belem and Manaus, giving only limited attention to the isolated areas of the interior. The designation of Manaus as a free port, where foreign goods can enter without paying any duties, has contributed to the further industrial development of the city.

SUVALE

The development agency for the São Francisco River Valley, in the isolated interior of Minas Gerais and Bahia, originally had a vast range of activities to perform and only a very limited amount of success, although it contributed to many small, often unrelated projects. It was reorganized and renamed SUVALE in 1967, with range of activities strictly limited. For the past decade, SUVALE has focused its attentions on the provision of basic irrigation projects which should improve agricultural production, and on sanitation projects which should improve the health of the valley population.

PRODOESTE

PRODOESTE is the development agency for the Central-West. The development of this region was begun seriously when Brasília was founded, and the location of the capital city in the eastern part of the Central-West has served as a focal point for many new development projects. The construction and paving of roads, marketing and distribution arrangements for agricultural products, development of cattle-raising and commercial agriculture industries, and food processing industries are supported by the activities of this agency.

Under the military regime a number of national development plans have been issued. At first concerned with economic stabilization and growth, and later including social goals, their usual time span was three to five years. While economic goals of expanded production, increased Gross National Product, and rise in per capita incomes were generally met and sometimes exceeded, those aspects concerning social welfare have been less successful. Although educational opportunities, sanitation projects, and health programs have reached more people, they have rarely expanded at a rate outpacing the rate of population growth. Thus, while more people's lives are affected, the proportion of the population benefitting remains relatively stable.

petroleum

Petroleum and petro-products have played a large role in Brazilian development. During the period of the "Brazilian miracle," 1968-1973, the nation remained dependent on foreign sources of supply for some 60% of its oil consumption, despite the expansion of Brazilian production. Petroleum has been basic to many of the industrializing efforts of the post-revolutionary period. As diesel fuel or gasoline, it powers cars, trucks, busses, ships, and airplanes. The petrochemical industry, which during the period was expanding at a rate of some 15% annually, provided more employment opportunities and also produced chemicals basic to a number of other industries. Because of the importance of the petrochemical industry, a national company was formed in 1968, and as it grew, it absorbed many of its small, private competitors. Fertilizers and pesticides, whose manufacture is petroleum-intensive, helped expand agricultural production. Plastics, many of which are derived from petroleum, have many uses in modern society. Petroleum is also used to make asphalt for paving roadways.

Because of the importance of petroleum, exploration for new sources within Brazil was promoted, but neither the Amazon region nor the off-shore region have yielded potentially important new oil fields. Large deposits of oil shale are found in the South, but the technology for economic removal of the petroleum is still being developed. Until 1973, petroleum was relatively inexpensive, and the large petroleum imports were balanced out by the expanded exports. But when the price of oil suddenly soared, an impact in the rate of economic growth in Brazil was soon felt, as strategies which had been based on the presumption of infinite amounts of cheap oil had to be modified.

inflation

During the period of the economic miracle, the inflation rate had gradually declined, averaging 25% yearly, a relatively low rate compared to that of the early and mid-1960's. Under Costa e Silva, the minimum wage was raised, although less than the rate of inflation. In the first years of General Emilio Médici's presidential term (1969-1974), the economy was sound enough to permit raises which exceeded the rate of inflation. This allowed a relative increase in the buying power of the working classes, although it did not rise to the level of the late 1950's. But as oil prices increased and the economic growth began to slow down, inflation rose to 30% in 1974 and 1975, and officially to 46% in 1976.

social/ political liberalization

Early in 1974, a new military president, General Ernesto Geisel, took office. At the beginning of his term, he indicated that some political liberalization would occur and that the public would be allowed more freedom of expression. Censorship was eased a bit, and a few newspapers began to comment on some governmental policies, although with little hope of affecting decisions. This liberalization came at a time when the economic slowdown was beginning to adversely affect large portions of the voting population, and in the relatively free 1974 Congressional election, the opposition party received some three million votes more than the governmental party, although ARENA kept its majority in both legislative houses. This expression of lack of faith in the party of the military government seemed to cause the hard line to reassert itself over the soft-liners again, and early in 1975, an anti-subversive drive resulted in the closing of two clandestine communist presses and the arrest, imprisonment, interrogation, and sometimes torture of over 1,000 people--including lawyers, professors, journalists, students, labor leaders, and leaders of the MDB, the sanctioned opposition

1974 elections

repression

party.

With the rapid climb in oil prices which began in 1973, the Brazilian miracle of exceptionally rapid economic growth began to slow down. Because of the economic expansion which had occurred, oil consumption increased, and, in spite of expanded production of Brazilian petroleum, Brazil could furnish only about 20% of its needs. This, in combination with the worldwide inflation and economic recession that accompanied the oil price rise contributed to large trade deficits and to a growing foreign debt. In 1973, Brazil's oil imports cost $600 million; by 1976, imported oil cost approximately $3.8 billion. Attempting to reduce dependence on foreign oil, the Brazilian government has recently invited foreign petroleum companies to participate in joint exploration for new Brazilian oil fields. This is the first such action since the establishment of the government monopoly in 1953.

dependence
on foreign
oil

Since 1973 a number of measures have been enacted to reduce the balance of payments deficit, to control consumption and to restrain the growing national debt. Imports of foreign machinery and component parts have been cut back, in an effort to encourage the use of Brazilian-made products. Higher tariffs on luxury goods and non-essential imports have been enacted, and some other tariff exemptions were removed. Tight credit restrictions have been established, an in late 1976, the government announced a 25% cutback in public expenditures, which will slow down the rate of development of the infrastructure. To limit the use of gasoline, prices were allowed to climb, and recently a surcharge on gasoline purchases was discussed. In addition, gasoline stations are closed on certain days.

The 1973 foreign debt, which was $12.5 billion, grew to $22 billion by the end of 1975 and to $28 billion by the end of 1976. Brazil is the biggest borrower of the developing nations--the biggest customer of both the International Development Bank and the World Bank, as well as from a number of overseas banks. Servicing the foreign debt in 1975 (paying both interest and principal) cost $3.2 billion, or some 40% of the export earnings. This, in combination with oil purchases leaves only 20% of export earnings to pay for other needed imports, including raw materials and capital equipment, so the deficit continues to grow and Brazil continues to borrow, with medium and long-term loans when possible. This allows major projects to continue, even if the pace is slower than that of past years. So far, Brazil's credit rating remains high.

foreign
debt

In spite of these problems, the Brazilian economy has continued to expand production at a healthy rate. In 1975, the GNP grew by about 5%, and the rate was over 8% in 1976.

By limiting imports and promoting agricultural, as well as mineral and industrial exports, the trade deficit began to fall, from $4.6 billion in 1974 to $3.5 billion in 1975. Soybeans, which have exploded in importance as an export crop, were Brazil's leading export in 1975. The exponential growth of soybean production over the past few years has been directly related to President Nixon's 1973 moratorium on United States soybean exports. Interested parties from Japan, the nation most affected by the moratorium, helped finance expanded Brazilian production to assure future supply, should United States exports again be stopped. Coffee, too, has been a steady source of export earnings for a long time.

coffee

In 1975 frost in southern Brazil damaged or destroyed about 70% of the coffee trees. (If they were replaced, it would still take four to five years for the seedlings to mature and begin to bear berries.) Before the frost, a 60-kilo bag cost $70; in January, 1977, it cost over $320. Anticipating a lower volume of exports which would affect governmental income, coffee export taxes have risen from $21 per bag to over $100 per bag during the same period, modifying what would have been a large loss in export earnings. In 1976, Brazil earned about 25% of her export exchange--some $2.4 billion--from coffee exports.

economic growth

foreign investments

The military regime still considers economic growth as the key activity which must be fostered, although the second five-year plan, covering 1975-79, has designed an ambitious program of social development. The kind of economic growth which has occurred in Brazil, especially since 1964, is unique in the capitalist world. There has been heavy dependence on foreign investments, even though a law was passed requiring 51% of any company to be owned by private or public Brazilian interests. Most foreign investments have been made in either extractive industries such as mining and forest products or in manufacturing. The 500 foreign subsidiary plants in Brazil account for about one-half of all export production. In 1975, of the 100 largest manufacturing concerns, multinational corporation subsidiaries owned 59 which controlled 50% of all manufacturing sales.

state capitalism

The expansion of governmental economic activities into economic areas previously dominated by private production is contributing to the development of an extensive system of state capitalism, the most all-pervading direct governmental economic involvement of the non-socialist and non-communist worlds. The highest administrative and managerial positions are very often filled by military officers in most of these state-owned concerns. Of the 571 government and government-affiliated companies, 200 have been formed since 1964, notably in the field of heavy industry such as armaments, petrochemicals, and ship building. The government owns 78 of the 200 largest companies in Brazil, accounting for two-thirds of their combined assets. Of the 30 largest corporations, 24 are owned by or affiliated with federal or state governments, and four are subsidiaries of MNCs. The two private Brazilian firms rank 28th and 30th.[14] As costs of new or expanded economic ventures rose during the world-wide inflation of the 1970's, private Brazilian firms have been hard-pressed to finance their industrial activities while producing competitive products. They have found themselves squeezed between governmental economic activities and those of the MNCs--both of which have access to the technology and necessary financial backing for new or expanded ventures.

private firms

No doubt exists that the economy of Brazil has grown and diversified remarkably since 1964 when military rule began. The rate of growth during this time, although based on economic patterns originally established before the military regime took power, has been, to a great extent, dependent on the government's decisions and strategies which allowed the implementation of its plans and the realization of its economic goals. There was little hesitation to utilize foreign capital, resources, and markets when these were not available domestically. This allowed much more rapid expansion and growth than would have resulted had Brazilian economic development been based on capital, resources, and markets found within Brazil alone. The rate of economic growth slowed after the global energy crises in 1973, but the economy is still strong, although the problem of inflation continues. With the help of income from the coffee trade, the Brazilian balance of payments situation is improving and the economy is strengthening in 1977. At this time it seems that the Brazilian economy will continue to grow and expand along the patterns of the past thirteen years, limited only by the general condition of the global economy and the availability of petroleum.

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[14] Bruce Handler, "Brazilians fear cancer of state-run industry," Newark Star Ledger, January 30, 1977, Section 3, p. 3.

## Student Activities

Define the following terms and then relate them to Brazilian development:

- development
- economic growth
- social development
- dual economy
- capital accumulation
- import substitution
- tied aid
- inflation
- economic planning
- technocrats
- nationalization of industry
- domestic (internal) market
- foreign markets
- state-owned industry
- state capitalism
- foreign competition
- political centralization
- censorship
- Fifth Institutional Act

Discuss the following questions, relating them to Brazil's development, and when possible, to the development of other countries as well:

- What is development? Compare and contrast it with economic growth.
- Do you think Brazil's development fits Rostow's theory? If so, match Brazilian history to as many of the five steps as possible. Where is Brazil in this process? Why?
- Can industrially developing nations afford the "luxury" of ecological conservation and pollution controls?
- What is the importance of petroleum to agricultural and industrial growth?
- What are the advantages and disadvantages of commodities cartels to the producer nations? To the buyer nations?
- What are the advantages and disadvantages of labor-intensive industry?
- What are the advantages and disadvantages of establishing factories which only assemble imported parts?
- What are the difficulties of establishing capital-intensive industries in developing nations?
- What are the advantages and disadvantages of allowing multinational corporations to become established in developing nations?
- How does the receipt of tied aid help a developing country? Help the donor nation?
- What are the advantages and disadvantages of having national planning offices?
- Is centralized government necessary for development?
- What are the advantages and disadvantages of increasingly centralized government in the short run? In the long run?

-What is the difference between state capitalism and a socialist or communist economic system?
-What are the advantages and disadvantages of state capitalism?

## Additional Readings

Bivens, Karen Kraus. The Capital Gap Between Developed and Developing Nations. New York: The Conference Board. This gives a good discussion of economic development and the role of capital in developing nations. It looks at a variety of national and international monetary sources.

Farley, Rawle. The Economics of Latin America: Development Problems in Perspective. New York: Harper & Row, Publishers.
Working on the premise that rapid population growth will be a factor in Latin America for many years to come, this book looks at many social and economic problems which affect development. There are a number of statistical tables and charts.

Gilbert, Alan. Latin American Development: A Geographic Perspective. Harmondsworth, Middlesex, England: Penguin Books.
This is a well-written book focusing on a number of developmental problems and upon the spatial adjustments which occur during the evolution of economic growth. It has many good maps and charts to complement topics under discussion, and many Brazilian examples are used.

Itamaraty. Brazil Today. Washington, D.C.: Brazilian Embassy. This is an occasional newsletter, usually four pages long. It disseminates up-to-date information on economic projects, industrial and agricultural growth, bi-national contracts, etc. To a lesser extent, there is social and cultural news.

Syvrud, Donald E. Foundations of Brazilian Economic Growth. Stanford California: Hoover Institution Press, Stanford University.
This book focuses on the economic policies following the 1964 military takeover, as governmental decision-makers and planners moved to stabilize and then stimulate the economy. It covers events through the early 1970's.

## Social Aspects of Development in Brazil

As seen in the preceding section, the Brazilian economy grew and diversified under the leadership of the military regime. Thus, the economic sector in Brazil is meeting the basic requirements for development. But, to evaluate the progress of the development process in any country, the expansion of social services and improved socio-economic well-being for increasing numbers of people must be examined as well. These two indicators--economic growth and improved social conditions--together give evidence of the success of development planning and policies.

demography

"Facts about fertility and mortality...are among the most important items of national accounting; for only such information secured on a comprehensive and accurate basis can supply the necessary guidance for programs of immigration, public health, education, agriculture, and industry."[1] Demography includes such things as size and density (the number of people per square mile or square kilometer) of a population; its distribution (where people do or do not live) throughout a given area; and vital statistics (including birth rate, death rate, migration in and out of a region, the percentage of a population in the labor force or of primary school age, etc.). The statistical study of people can help planners make realistic designs to meet the long and short-term needs of people.

Demographic knowledge of an area also allows study of the distribution of goods and services within that area. Development is social--affecting individual people, their families and friends--as well as economic--measured in the expansion of agricultural and industrial production. A comparison of the distribution of services which affect people's lives (electricity, running water, sewage disposal, schools, hospitals or clinics, public transportation, etc.) and the goods which indicate participation in the modern facets of national life (refrigerators, gas stoves, indoor plumbing, radios, cars, factory-made clothing and shoes) with the distribution of the population is an important measure of a country's development. Is this process affecting the level of living of the majority of the people, or simply reinforcing the concentration of existing levels of comfort within certain social groups or geographic regions?

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[1] T. Lynn Smith, Brazil: People and Institutions (3rd ed.; Baton Rouge: Louisiana State University Press, 1963), p. 97.

government's social responsibilities

In most developed societies, it is assumed that the government (local, state, and national) is responsible for certain minimal levels of health and well-being of the people when they, themselves, do not have the resources to attain and maintain those minimal levels. In the United States, for example, food stamps and welfare monies or unemployment compensation are available to people who cannot get jobs and meet set minimum standards of living themselves. Other governmental services, such as education, are available to all people. In developing nations, many governments are attempting to assume these responsibilities, to offer these types of services to those segments of the population which have never before received them. These are often people living in isolated rural areas or urban slums. Many international or extranational non-governmental agencies are actively trying to assist the governments in developing nations, especially in the fields of basic education and health care. Yet, while the present needs of the people strain the abilities of those who are trying to provide a minimal level of services, rapid population growth often causes even more strain and expenditure on the systems. Unlike the United States, where a minority of Americans suffers from lack of medical attention, is poorly educated, suffers from malnutrition or hunger, and is unemployed or underemployed, developing countries have a majority of their population experiencing these conditions.

Financial realities limit governmental expenditures in social development programs. The construction, equipping, staffing, and maintenance of facilities for schools, hospitals, public transportation, and sanitation works all call for continual expenditures. A balance must be found between social investments such as these, which will give the nation long-range benefits and improve the lives of many people, and economic investments with more immediate returns which will provide the monies for future investments, as well as absorb growing numbers of people into the active labor force. These two sectors have different initial needs, and both require enormous financial outlays.

population growth

The more people there are to provide for, the more that provision will cost. Realizing this intellectually, however, will not in itself cause people to want to have fewer children for the good of the nation. Most population experts believe that birth rates will decline only when couples of childbearing age are motivated to do so, when they believe that having fewer children is to their own personal advantage. This has tended to occur in regions where the level of living is rising and educational and employment opportunities are expanding. It takes time for large numbers of people to want to have fewer children.[2]

Therefore, the planners of most developing countries must take continued rapid population growth into account in their projections, rather than assume that the rate of growth will soon slow down appreciably. In any nation, the equitable distribution of the fruits of economic growth is a difficult, time-consuming task, made even more difficult by the birth of an additional few million children every year. It can well be years before the rate of population growth declines substantially, even when there is economic development, unless governmental coercion, such as that attempted in India, is applied vigorously. An important corollary is that countries now undergoing rapid population growth often have large percentages of the total population under the age of twenty. Half of Brazil's 110 million population is now under twenty. (See Chart I) Many are consumers who do not contribute to the production of goods and services, and these same young people have easily twenty or more years in which to have children themselves. Even if their birth rate were relatively low, the absolute numbers of people would continue to grow rapidly for a long time to come.

The two words which might best summarize the population trends in Brazil are growth and urbanization. Brazil currently has a population of over 110 million and is growing at a rate of 2.8% annually. If this growth continues, it will take only 25 years for the population to double.[3] In 1964, when the military took power, there were already about 80 million Brazilians, and the pro-natalist official policy has been changed only recently.

population distribution

Traditionally, the population has been rural and scattered along the coastal areas of the North-East, the South-East, and the South. The most important functions of the urban areas were administrative, educational, and commercial, while the agricultural and mining sectors which supported

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[2] For further discussion, see William Rich's Smaller Families Through Social and Economic Progress (Washington, D.C.: Overseas Development Council, 1973).

[3] Population Reference Bureau Data Sheet, 1975.

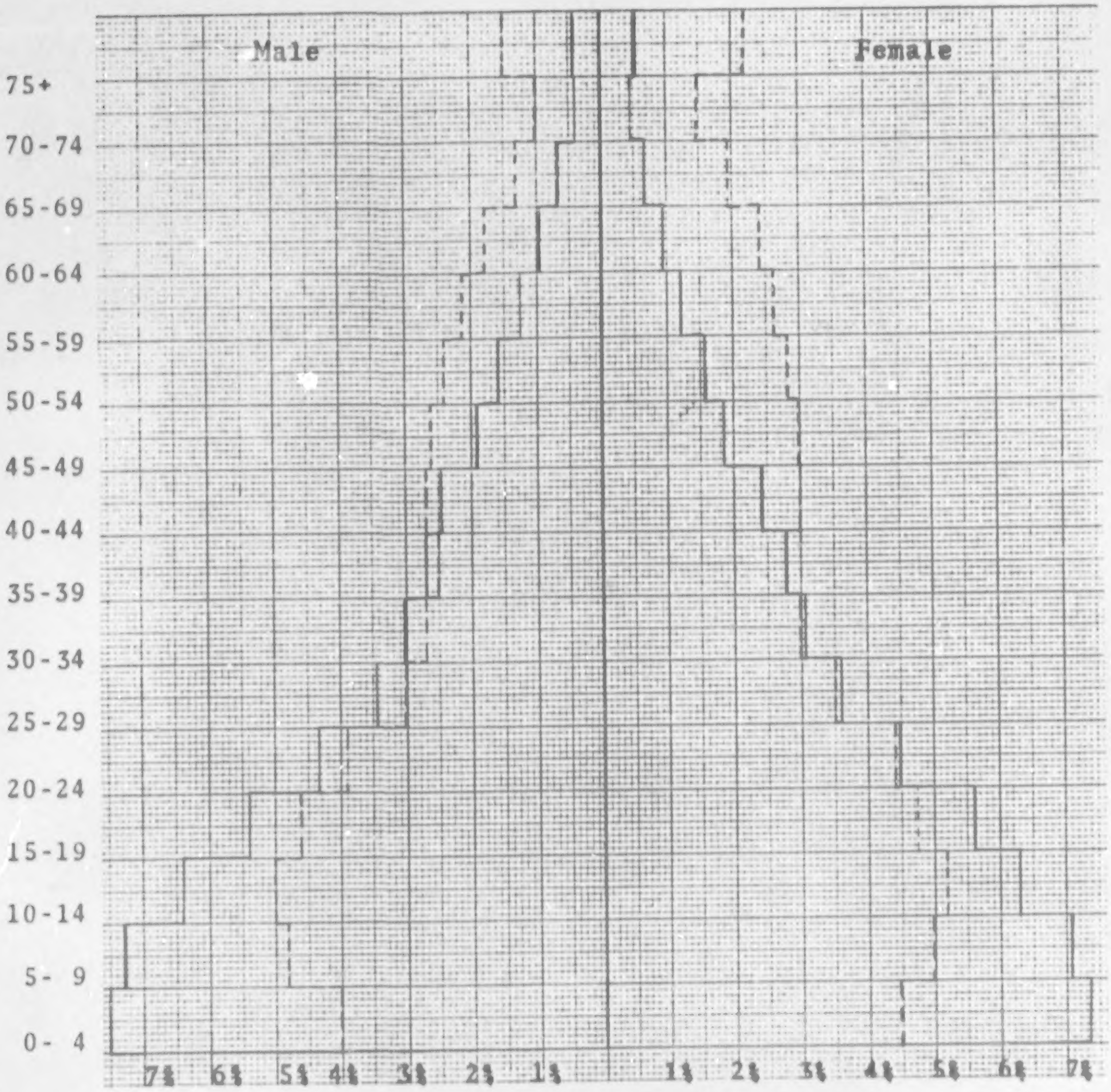


Chart I. Comparative Age Pyramids for Brazil and the United States

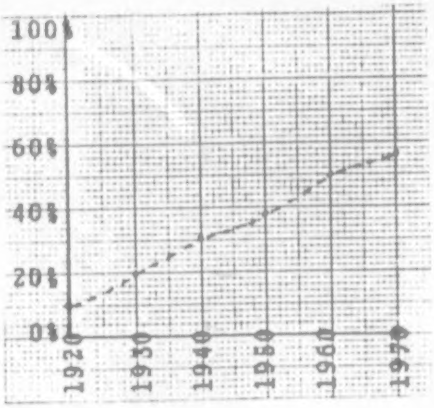
——— Brazilian data for 1972, Sinopse Estatística do Brasil, 1975 (Rio de Janeiro: Fundaçao Brasileiro da Geografia e Estatística, 1975), v. IV, p. 92.

--------- United States data for 1970, United States Bureau of the Census the economy and absorbed the labor force were rural. As agriculture has declined in relative importance, industry has grown. The vast majority of all industries are located in urban and suburban areas, where the transportation and communication infrastructures and a relatively educated labor force are available. As a result, the cities and towns, too, have grown in importance, and for the past half century, Brazil has been urbanizing steadily. (See Chart II)

urbanization

Chart II.

Percentage of Population in Urban Areas of Brazil



Brazil now has a number of cities with populations of over one million. Three of them, Rio de Janeiro, Recife, and Salvador, have been important regional centers since they were founded during the beginning of the colonial era. Two, São Paulo and Belo Horizonte can directly relate their population explosions to industrial expansion. (See Chart III) In 1970, over five million people were employed by industry, 62.5% of whom were in the industrial triangle area of São Paulo, Minas Gerais, and Rio de Janeiro.[4] This concentration is a result of the convergence of monies and entrepreneurs from the São Paulo area, natural resources from Minas Gerais, and administrative and commercial inputs from Rio de Janeiro. This area also has the best railway and highway transport routes and communication facilities in the nation. In addition to the growth of the cities, the population is rapidly becoming more concentrated throughout the southern half of the nation, as the North-East continues to decline in relative importance. Even with regular rains in the farming regions of the North-East, an estimated 100,000 northeasterners migrate annually

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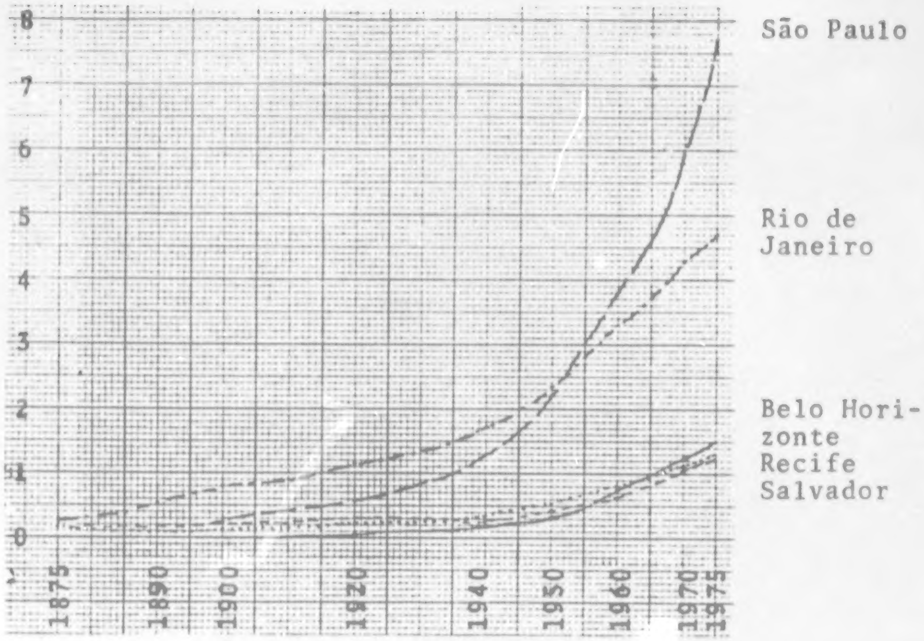
[4] Ministerio de Relaciones Exteriores, Brasil (Rio de Janiero: Instituto Brasileiro da Geografía e Estatística, 1972), p. 214.

Chart III.
Growth of Five
Major Cities
(in millions)



Ministerio de Relaciones Exteriores, Brasil (Rio de Janeiro: Fundação Brasileiro da Geografía e Estatística, 1975), v.IV, p. 92.

1975 data courtesy of the Consulate General of Brazil, New York, New York.

to the south.[5] (see Chart IV)

favelas

A result of the migration to urban areas has been the growth of favelas, or shantytowns, which surround the cities. Many favelas grow up on lands which have never been developed because of undesirability or difficulty of access: the steep hillsides of Rio de Janeiro, the tidal flats of Salvador and Recife. To an outsider, life in a favela might appear unbearable--the houses are made of whatever materials are locally available. Many areas have no sewage disposal, and wastes are disposed of in the unpaved streets. Occasional public fountains provide water which must be carried to the surrounding areas. Electricity, paved roads, or public transportation are often unavailable. Yet newcomers crowd into the favelas, and often live no worse than they would have in the country. It has been estimated that in 1970, 30% of the population of Rio de Janeiro, 41% of the population of Brasília, and 50% of the population of Recife lived in slums and

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[5] *Ibid.*, p. 185.

Chart IV. Percentage of National Population by Region

| | 1872 | 1890 | 1900 | 1920 | 1940 | 1950 | 1960 | 1970 |
|---|---|---|---|---|---|---|---|---|
| North | 3.4 | 3.3 | 4.0 | 4.7 | 3.3 | 3.6 | 3.7 | 3.9 |
| North-East | 46.7 | 41.9 | 38.7 | 36.7 | 34.8 | 35.0 | 31.6 | 30.3 |
| South-East | 40.5 | 42.6 | 44.9 | 44.6 | 44.8 | 44.4 | 43.8 | 42.7 |
| South | 7.2 | 10.0 | 10.3 | 11.5 | 14.0 | 13.5 | 16.7 | 17.7 |
| Central West | 2.2 | 2.2 | 2.1 | 2.5 | 3.1 | 3.4 | 4.2 | 5.5 |

Ministerio de Relaciones Exteriores, Brasil (Rio de Janeiro: Instituto Brasileiro da Geografía e Estatística, 1972), p. 199.

squatter settlements.[6] On the positive side, living in a favela represents an opportunity to work and earn some kind of monetary income, the possibility of educating the children, and possibly the eventual opportunity to buy a plot of land upon which to build a house. Many favela dwellers organize themselves and make basic improvements through community action programs, such as extending water pipes or running in electric wires. Thus, for many poor newcomers to the cities, favela life is seen as a transitional step toward the beginning of social and economic advancement.

migration
to the
interior

As the migration to the cities has increased, the government has become interested in taking measures to encourage movement toward the still sparsely-populated Brazilian interior, specifically to the North and Central-West. Here both agriculture colonization and resource development seem to be potentially feasible economic ventures. One of the major constraints to the development of the interior has been the lack of land transportation routes. Numerous isolated communities already exist, but difficulty of access limits their participation in the national economy, as well as in the social and political life of the country. Both getting merchandise in and sending local products out are prohibitively time-consuming and costly. Other regions are so isolated that virtually no one lives there except small bands of primitive Indians, some of whom are on government reservations.

Brazil's population historically has been concentrated along the coastal areas, and most Brazilians still live within two hundred miles of the ocean. During the colonial period, this facilitated the export of commodities to the mother country. The relative ease of transportation along the coast and the prohibitive nature of the rugged terrain of the immediate interior discouraged the movement of the population further inland. As the country developed, the amenities of contemporary life also concentrated in the coastal cities. The mineral wealth of Minas Gerais and the agricultural potential of the South and São Paulo state in the interior were the exceptions to this trend, in which there occurred stable, long-term development.

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[6] World Bank, Housing: Sector Policy Paper (Washington, D.C., 1975), p. 62.

For the past twenty years, the Brazilian governments have undertaken several major projects designed to open up the interior. The creation of Brasília, inaugurated as the national capital in 1960, in the middle of a sparsely populated area six hundred miles into the interior, was a major step in encouraging the integration of this part of the country into the activities of the rest of the nation. During the period of construction, thousands of rural migrants were employed as unskilled laborers. Many of the national ministries, as well as all the foreign embassies, have relocated to Brasilia, and the commerical, social, and cultural activities demanded by a cosmopolitan population have been expanded to include this modern, planned city. By 1970, the capital itself had a population well over 500,000, with an additional 22,000 people in the surrounding rural areas of the Federal District.

To service the capital, existing highways were extended to the city, and new routes were created to connect Brasilia to major cities in distant regions. The almost 1400 mile Belém-Brasília Highway, which connects the capital with the region at the mouth of the Amazon River, has influenced the entire region through which it passes. Along the route, the population has grown from less than 100,000 to over two million people. There have been large increases in the production of commercial crops such as corn, beans, rice, and cotton, and the region now supports some five million head of cattle.[7] Small towns are growing as market and administrative centers for the surrounding areas.

Similarly, the more than 2,000 mile Trans-Amazon Highway, begun in 1970, is expected to allow development in the Amazon basin. Transportation routes are needed for development of the mineral resources, and a labor force must still be attracted. Settlement projects directly related to the highway construction have been undertaken, in which ten kilometer strips on either side of the highway are reserved for immigrant farmers from the overpopulated North-East. A basic problem has been that the northeasterners, accustomed to the semi-arid and drought conditions of the North-East, are not prepared for the abundance of water and common flooding of the Amazon basin and do not know how to cope with such conditions.[8] While complicating the problems of settlement, this has not stopped the process, and most immigrants who stay do learn to cope with their new habitat eventually.

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[7] Alan Gilbert, Latin American Development: A Geographical Perspective (Harmondsworth, Middlesex, England: Penguin Books, 1974), p. 171, quoting J.M.C. Kleinpenning, "Road Building and Agricultural Colonization in the Amazon Basin," Tijdschrift voor Econ. en Soc. Geografie, LXII, (September-October, 1971, pp. 285-289.

As Brazil has attempted to populate the interior by redirecting the country's internal migration and to provide a minimal infrastructure for economic development, it has met both successes and problems. Massive construction projects have employed large numbers of unskilled workers and attracted even more, but as yet, few ways have been found to employ these people when the construction projects end. Highway building has opened up new areas to settlement. While occasionally successful, transportation systems and land are not always enough to ensure success--migration to the interior has not been successful when habitat conditions change significantly. Agricultural extension workers and health education workers are not yet trained in the numbers necessary to facilitate the changes in life-style and labor habits which allow the successful settlement of migrants. These are, however, necessary steps in the development of the Brazilian interior. As coastal areas become more densely populated, as growing numbers of rural people look to the cities and towns as their only hope for improvements in their lives, and as heavily farmed lands lose their fertility, the interior of the nation will be utilized to the extent that it can be. However, the longer that planned actions to further develop the interior are postponed, the more expensive they will be to the nation, in both economic and social terms.

## Health and Nutrition

Good health is essential to both human and economic development. At the same time that it is necessary to allow optimal development of the individual, an overall level of good health also contributes to economic growth. Poor health is costly for a number of reasons:[9]

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[8] Marvin Howe, "Vast Amazon Road Project Is Bogged Down," New York Times, August 14, 1975, p. 1.

- It reduces availability of labor--absenteeism reduces output, even if substitute laborers can be employed.
- It lowers the productivity of workers--strength, stamina, and the ability to concentrate are impaired.
- It impedes the development of new resources--prevalence of regional illnesses such as malaria or sleeping sickness hinders colonization of lands; animal diseases which affect humans such as pork and beef tapeworm, anthrax, sleeping sickness, and some forms of schistosomiasis hinder livestock development; potential tourist industries can be hindered when the risk of contracting disease is high.
- It wastes current resources--intestinal parasites consume nutrients; treatment of illness diverts monies from other uses.

Health problems are further complicated in those countries, such as Brazil, with dual economies. One finds marked differences in the general level of health between the modern and the traditional sectors. The members of the modern sector, overall, live and work in more hygienic conditions and have more access to medical care. In the traditional sector, where manual labor is the general rule and workers depend on their physical forces and stamina as their most important, if not their only, tool, the general levels of health are relatively poor. This leaves the sector which most needs to benefit from all forms of socio-economic development the least able to help itself to do so. Different kinds of health programs, with different kinds of specialists, equipment, treatments, and goals are needed. Even where the desire to improve the condition of the traditional sector exists, positive results are difficult to achieve. Governmental bureaucrats and planners, as well as doctors, predominantly products of the modern sector, control what will be done in the traditional sector. Their approach to resolving problems is naturally based upon what they, themselves, have experienced in the modern sector, rather than upon what has been experienced in the traditional sector. Therefore, when they approach the needs of the latter, they are not equipped with the necessary cultural understanding for resolving those problems.

Good health, basic to the physical and mental development of every person, is affected by nutrition, hygiene, and the availability of medical services. Of these three factors, the most basic is food. Malnutrition is a primary cause of death among infants and small children in developing countries.

malnutrition

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[9] World Bank, Health: Sector Policy Paper (Washington, D.C., 1975), pp. 25-27.

In women of childbearing age, it contributes to premature births and poor health in babies. It also impairs adequate body response to disease, so that illnesses which are merely nuisances in developed areas are severe, often fatal, to both adults and children with no resistance.

When considering levels of nutrition, more than simple national consumption quotas should be observed. The nutritional quality of foods must be examined, as well as the distribution of food resources by region, social sector, and economic level within the society. For example, the Brazilian North-East contains about 30% of Brazil's population. One of the least developed regions, it also is one of the world's major pockets of widespread, severe malnutrition. In general, few Brazilians have what is considered by nutrition experts to be a balanced diet. Rather, they rely mainly on traditional foods which are rich in carbohydrates, only adequate in protein, and deficient in the vitamins and minerals so important to sustain good health and to allow growth. And yet, statistics from the UN's Food and Agriculture Organization show Brazil's national per capita food consumption, measured in calories, to match national food requirements.

protein

The three principal sources of protein are fish, meat, and legumes (beans, peas, etc.). In Brazil, beans are the primary source of protein, although of lower quality and with less amino acids than animal protein. Although Brazil is the world's second exporter of soybeans, which have nutritionally high-quality, non-animal protein, other less nutritious beans are generally consumed within the nation--each region having its own traditional favorite. While consumed by members of all socio-economic groups, the importance of beans is greatest at the poorest levels, where they are virtually the only source of protein. As income increases, animal protein becomes more available in the diet.

prestige foods

In Brazil, as in most nations, food supply is affected by the locale in which people live. Conditions vary between rural and urban sectors and within these areas themselves. Urban residents cannot produce for their own needs, except in minimal, supplemental ways. Urban areas are dependent on supplies which can be shipped in from the surrounding rural areas and occasionally from more distant regions. Important factors, then, are the types of products of the region, the transportation system, and the availability of refrigeration or other methods of preservation. Socioeconomic status, too, is very important in determining both the quantity and the variety of foods--what can a person afford to feed his family? Expensive prestige foods, such as meat, fish, eggs, milk, and some processed wheat products (often highly perishable, needing refrigeration) are consumed on a regular basis by the upper class and some middle class people. But the poor have a rarely varying diet of beans, some rice, and in many regions, manioc flour, all reasonably inexpensive and easy to store. The urban poor, usually engaged in strenuous manual labor requiring protein for endurance and stamina, most often have only minimal, low-quality, protein intake. The children of the urban poor are also at a great disadvantage--there is increasing evidence that protein malnutrition in early childhood causes permanent damage to the brain and central nervous system. These children, who may be among the first members of their families to ever have had the opportunity to attend school (an absolute "must" for socio-economic advancement), are at a great physical and intellectual disadvantage when they begin, and few can continue for more than a year or two.

South

In rural Brazil, too, nutritional health varies in quality. Under good conditions, rural Brazilians can produce a large portion, if not all, of the foods they need. Under poor conditions, they suffer the same problems as the urban poor. The South has fertile lands, abundant water, a temperate climate, natural forage for livestock (beef and dairy cattle, pigs, etc.), and a tradition of small family-owned farms which are engaged in mixed agriculture. It also has the highest per capita food consumption levels, and the overall levels of health are well above the national average. Resources exist for the production of a variety of foodstuffs which lend themselves to balanced diets. The advanced transportation system facilitates the sale of surplus foods, and purchasing others, as well as new seeds, fertilizers, etc. The high production of milk, a perishable food, contributes to high milk consumption in these rural areas. Meat consumption is also high. It is not surprising that the people of this region are thought of as "hard-working and industrious." They are well-nourished and therefore physically capable of being so.

North-East

Food consumption in the rural North-East, on the other hand, is extremely low when compared to the rest of Brazil. Climate is one factor in this difference. The equatorial sun and high heat limit the foodstuffs which can be grown successfully. Most livestock cannot stand the heat. Zebu cattle, which are able to survive in this climate, furnish neither milk nor meat in comparable amounts to the production of the dairy and beef cattle of the temperate regions. Rainfall is not abundant; in good years it is adequate to produce crops and to support grazing herds. In bad years, when the periodic droughts occur, the crops dry up, the animals die, and starvation is common, even though many people flee to the cities or leave the region entirely. A second factor in limiting agricultural production is the centuries-old tradition of expansive fazendas which occupy the vast majority of the rural lands. Once these fazendas were owned by families who lived

fazendas

on the lands. Now many of them are owned by corporations and run by overseers. Many fazendas permit large portions of their lands to lie fallow, not to enable the lands to regain fertility, but simply because the owners see no benefit to be gained by working them. At the same time, there are many landless farmers. Many fazendas are worked by tenant farmers, who labor for stipulated amounts of time on the owner's lands and in their free time produce for themselves and their families on land lent by the owner. In most cases, the level of technology is low; the hoe is the main tool. The land is over-cropped and there is no access to improved seeds or fertilizers to increase production. Many of these people are basically outside the money economy, and alternative money-producing activities are largely absent from this resource-poor region. Most people subsist at minimal level, isolated from the advances of "modern" Brazil. Widespread malnutrition is the result, and at present, there are no viable alternatives for the people who wish to improve their condition without leaving the region.

hygiene

While adequate nutrition is an important factor in the maintenance of good health, it cannot by itself insure good health. Dramatic improvements in the general levels of health in many nations can be made through increased levels of hygiene. Investments in potable water systems and sewage systems lessen the incidence of disease. Most cities in Brazil have these facilities, at least in the middle and upper class sections, but in the favelas and most rural areas, generally no source of pure water or waste disposal system is provided. In 1970, almost four thousand municipios (cities, towns, and villages) existed in Brazil. Of these, only 57% had piped water (although only 6% had some kind of water resevoir system), and only 40% had sewage systems.[10] Without proper sewage disposal, not only are breeding grounds for disease-bearing insects formed, but also much of the waste can seep down to the levels of ground water, contaminating the water which people use for drinking, cooking, washing, and bathing. Dysentery, typhoid fever, hepatitis, and schistosomiasis are some of the diseases spread because of impure water supply. Also from impure water come intestinal parasites which, while rarely fatal to the carrier, are often chronic and debilitating.

health education

Increasing education about nutrition and hygiene is an essential step toward improved conditions. Hygiene education of the public at large is very important in alleviating the incidence of some diseases. Knowing the importance of boiling drinking water, washing hands, housing animals separate from the family's living quarters, using water from upstream beyond where wastes are disposed or clothing is washed can all contribute to better health.

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[10] Ministerio de Relaciones Exteriores, op. cit., p. 399.

Although malnutrition is often caused by factors which the individuals affected cannot change, nutrition education can help people to take the most advantage of what is available. Often people's diets and their hygiene practices are entrenched in their traditions, making the introduction of change or improvements especially difficult. In Brazil, as in many nations, the levels of education for improved public health are not adequate when compared to the needs, and specialized technicians who can work productively in community health education are insufficient in number. Attempts at educating the public are made, however, through articles in magazines and newspapers, and through programs on television and radio. It remains to be seen if the people who could most benefit from health education are affected by these attempts since many people cannot read. In 1970 there was an illiteracy rate of 39% in the population over five years of age. Only a minority of families have either radio or television. Without these advantages, the information now made available through these media cannot reach those who need it most.

health care

Higher standards of health are also dependent upon the availability of professional health care--skilled and semi-skilled medical personnel, hospitals and clinical services. In most countries, both public and private medical facilities are concentrated in the cities. Brazil has 3,397 hospitals of which 85% are private, and almost 73% are located in the South-East and South. In addition to the hospitals, there are over 5,000 public health clinics, over half, again, located in the South-East and South. Conducive to better health in the urban areas is the fact that in 1970, in every Brazilian state, with the exception of São Paulo, the concentration of medical facilities in the capital city was appreciably higher than the relative concentration of the population.[11] While members of the elite can afford private health care, where they receive excellent treatment, the majority of the people must look to alternative sources for medical care. The specializations of many medical professionals, also, are not aimed at the interests of the basic health care of the majorities. Rio de Janeiro, for example, is considered by many to be the plastic surgery capital of the world. Public hospitals and clinics are one source of health care for large numbers of people. But people who can least afford private care are also the people most exposed to conditions which

public clinics

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[11] *Ibid.*, pp. 446-447, 456-457.

breed ill health. The demand on public facilities, therefore, is often very heavy, resulting in over-crowding and long waits. In public clinics or hospitals, the personnel are often overworked and underpaid, and dependent upon governmental expenditures for the medical equipment and medicines which they need. Needless to say, in a country with a large population and a high rate of growth, providing adequate public health services and expanding existing services requires a large, continuing expenditure on the part of the government. In 1971, the Brazilian health budget was 1.4% of the national budget, or approximately 80¢ per capita. This is very low even for developing countries. that same year, India spent 91¢ per capita; Ghana spent $3.76; Colombia, $2.04, and Algeria, $4.53.[12]

public expenditure

For those who do not live in the vicinity of a hospital or clinic, it is quite possible that they cannot get professional medical treatment. This depends upon the distance a sick or injured person can afford (in both time and money) to travel, often on foot. Far from professional medical care, the ill often turn to alternative sources, usually local people who have gained some medical skills through experience or tradition--midwives, pharmacists who often will prescribe medicines when sick people tell them the symptoms, herbalists, or faith healers who perform cures based on local religious beliefs. While some of these alternative sources of health care are effective when confronting certain kinds of medical problems, the need for professionally trained medical personnel is still very important.

alternative sources of care

The characteristics of the major causes of death in developing countries are often quite different from the causes of death in the developed countries. In the United States, for example, the three main causes of death are heart disease, cancer, and strokes, all of which occur because of bodily malfunction. They are not caused by environmental factors such as exposure to bacteria. In Brazil, in 1970, the two main causes of death were infectious ailments which are caused by environmental factors against which the body cannot always defend itself, but which can be eliminated through fairly simple preventive measures.[13] While the overall death rate was nine per thousand, the infant mortality rate (children under one year of age)[14] averaged

causes of death

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[12] World Bank, Health, op. cit., p. 75.

[13] Ministerio de Relaciones Exteriores, op. cit., p. 181.

[14] Ibid.

infant mortality rates

94 per thousand live births. As with other indicators of development in Brazil, infant mortality rates are not even throughout the nation; rather they reflect the level of regional socio-economic development. They are lowest in the city of Rio de Janeiro and the states of São Paulo and Rio Grande do Sul, and highest in the North-East where, in 1969, rates were 169.3 per thousand in Natal and 164.3 per thousand in Recife, two of the largest cities in that region.[15] Health campaigns and advanced medical technology have done much to reduce the death rate and therefore have contributed to the growth of the population. But much work remains to be done. The dominant problems in rural Brazil are still malnutrition, infant mortality, and contagious disease.

health campaigns

A number of health campaigns have been mounted by the Brazilian government, some in cooperation with foreign or international foundations, and health organizations. Most have been aimed at the control or eradication of diseases which, although they affect large regions in Brazil, have been controlled or virtually eliminated through technology in most developed countries. These diseases are most common in rural areas of Brazil. When not fatal, they often cause irreparable damage to their victims, debilitating them and impairing their ability to work and care for themselves. Organizations such as the World Health Organization (WHO), Pan American Health Organization (PAHO), U.S. Agency for International Development (USAID), the Peace Corps, and Rockefeller Foundation have volunteered monies, supplies, and personnel for campaigns such as those against malaria, smallpox, yellow fever, measles, and schistosomiasis. Without the extranational assistance, it is possible that these diseases would still be rampant, instead of under control, as they now are. Other diseases, such as Chagas disease, the American form of sleeping sickness, fatally affect millions of people, and additional research is needed to find treatments and cures.

paraprofessional health workers

Paraprofessional health workers can contribute to improved health standards. Their use in government programs would be in many ways less expensive than the use of highly trained, specialized doctors. While a doctor may need five or six years of expensive university education, a paraprofessional could be trained in a much shorter period of time and at much less expense. Several paraprofessionals could be trained for what it costs to prepare one doctor. While most developing nations need more doctors, the existence of a functioning force of paraprofessionals would release many doctors to concentrate on medical problems in which their specialized training could best be used. But thus far in Brazil, medical careers under the level of doctors are unpopular and attract few people.

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[15] Once a child has survived his first year of life, the probabilities of a long life increase substantially.

High levels of health and health care are concentrated in the urban centers of the South-East and in some parts of the South. They are most accessible to members of the middle and upper classes, those who can also afford nutritious foods, hygienic living conditions, and private medical care. The urban poor and most rural people have lower health standards which affect their life spans, physical and mental development, and ability to care for themselves. While health campaigns and health education programs do exist, they are usually traditional in their approach and in most cases limited in their scope and success. Since high levels of health benefit economic production as well as individual well-being, Brazilian development is hindered by this condition. The longer it is allowed to exist, the more expensive and time-consuming it will be to make progress in this field.

## Education

individual benefits

In developed societies, some minimal level of formal education is a prerequisite to being able to function adequately in daily activities. Some schooling is necessary for all but the most menial of employment opportunities. Literacy is a requirement for franchise in most countries. In addition, basic education contributes to the individual's success in such common activities as shopping, traveling, job hunting, and keeping up to date on matters of interest or importance. In the traditional sectors of society, education is of a different kind, in which children learn the necessary skills for survival from their parents and relatives, and from their own observations. This education is of little use when a person experiences major changes in the economic and social structures of his life, in contrast to those of his ancestors.

national benefits

While education offers benefits to the individual, an educated populace offers benefits to the nation as a whole. Schools provide people with the skills, habits, and disciplines necessary to manage and work in industry, commerce, government, and in social services such as medicine and education. There is a positive correlation between increased education and increased productivity.[16] Through the growth and development of the economy, more goods and services are available for distribution to the people of the nation, as well as for export, and the government, in turn, can earn the monies needed to expand public services. Literacy in rural areas allows government extension services, such as agriculture and health education, to provide information in pamphlets. These can reach more people less expensively and more productively than can extension service agents who talk to the people who are most accessible.

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[16] Rawle Farley, The Economics of Latin America: Development Problems in Perspective (New York: Harper & Row, Publishers, 1972), p. 103.

social mobility through education

While the Brazilian government is expanding educational opportunities at all levels, an enormous gap still exists between educational goals and educational achievement. Ever since Jesuits founded the first schools in the 16th century, education has been seen as the privilege of the elite. Even today, those people who are of "better" families, that is, from families of higher socio-economic status, have more and better educational opportunities than do the children of the poor. Those who have a good education also have more opportunities for socio-economic advancement. The problem of the poor, who traditionally have been outside the reach of formal education, is to break this cycle and to obtain as much education as is possible, given the constraints of economics, health, and availability of schools and openings in them. It is through education that some economic advancement is possible for the people of the lower socio-economic sectors.

Since the 1930's, upward mobility has occurred for some people in Brazil, to a certain extent, because certain minimal levels of education have been necessary in the laboring classes of the modernizing, industrializing nation. Especially since 1930, expansion of Brazilian education has been used to promote economic development. A side effect has been some social mobility and change for those who received schooling because of this expansion and then managed to be employed outside the traditional sector. Since 1934, every Brazilian Constitution has promised free and compulsory education to all citizens of the nation which, in theory, would benefit all social classes. Yet, in 1971, only 61% of the population aged five and over was literate.

location of schools

Because of Brazil's vast size and because the industrializing sector which requires people with some schooling is, to a great extent, concentrated in the Rio de Janeiro-Belo Horizonte-São Paulo triangle, educational facilities and opportunities have tended to remain concentrated, in the cities and in the South-East and South. In spite of efforts to create more equal educational opportunities throughout the nation, inequalities exist. Three-fourths or more of the children not attending schools live in rural districts.[17] In the traditional rural sector, education is considered a luxury and children are often kept home seasonally to help their families. Often, these children stop attending altogether after a year or two. Even in those cases where a rural family wants at least some of its children to finish the primary grades, the cost of school texts, paper and pencils, and travel to the nearest school (and sometimes uniforms) may be prohibitive. Although there are schools scattered all over Brazil, the literate population tends to be located both in the South-East and the South, or in urban areas. Besides the greater overall availability of schools in these regions, it is probable, too, that many of the rural people who do receive some schooling migrate either to regional urban centers or to the southern part of the nation in search of better employment opportunities.

goals of education

The goals of education are a major issue in developing countries. What portion of the population should be educated? How much should each level of education (primary, secondary, higher, adult, etc.) be expanded? What kind of education (academic, vocational, commercial, agricultural, etc.) should be offered? Can traditional schools serve the needs of economic expansion and social equality, or do new kinds of educational facilities have to be designed? What kinds of skills and specializations should be encouraged? Do the manpower needs of the nation concur with the educational desires of the people? Should technical schools be established, or should specialists be educated abroad?

centralized Ministry of Education

Centralized ministries of education facilitate the establishment of these and other goals in most nations. The Brazilian Ministry of Education is very powerful, establishing the goals and the means of reaching them. This includes what can or cannot be taught in the classroom. The individual teacher has little influence over what he teaches. In many developing countries, a main goal of education is to foster a sense of belonging to the nation and identifying with it. Since Brazil has been an independent nation for over 150 years and is not a region of isolated, discrete ethnic groups, overt politicization is not a key element in Brazilian education. However, a political undercurrent in the schools is aimed at fostering acceptance of a government which came to power through military coup and which has all-pervasive powers, while proclaiming democratic ideals. The economic goal of Brazilian education is training the specialists and technicians which the industrial society of a leading nation requires.

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[17] Poppino, op. cit., p. 319.

primary

One of the government's social goals is to expand education to reach more people. A national goal of 100% matriculation of children between the ages of 7 and 11 was set in 1970. While absolute numbers of children in primary schools have increased dramatically (see Chart V), 52% of the primary age group still had no access to schooling in 1970. Even in the largest urban centers, only 15% of the children who enter first grade enter fourth grade; in the poorer areas, pupils rarely make it to second grade.[18] Primary education (grades 1-4, and, in some places, optional fifth and sixth grades) has largely been the responsibility of the state and local governments. The federal government has begun to participate in the funding, in an attempt to eliminate local deficiencies and to make primary education more equally available. In comparing rural and urban schools, there is little doubt that urban schools reach more students, are better equipped, and have more and better-trained teachers.

Chart V. Absolute Numbers of Primary Students Matriculated

| | | | |
|---|---|---|---|
| 1920 | 1,250,000 | 1969 | 12,294,343 |
| 1930 | 2,084,000 | 1971 | 17,066,093 |
| 1940 | 3,302,000 | 1972 | 18,370,744 |
| 1950 | 5,240,000 | 1973 | 18,573,193 |
| 1960 | 7,458,000 | | |

Ministerio de Relaciones Exteriors, Brasil (Rio de Janeiro: Instituto Brasileiro da Geografía e Estatística, 1972), p. 208.

Fundação Instituto Brasileiro da Geografía e Estatística, Anuario Estatístico do Brasil, 1975 (Rio de Janeiro, 1975), p. 793.

secondary education

At the post-primary level, a number of academic and vocational options are available. At this level, however, the goal is no longer to educate 100% of any age group. National goals are to give two additional years of secondary schooling to 70% of all children who go to primary school; four additional years to 50% of all these children; and it is planned that

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[18] Ministerio de Relaciones Exteriores, op. cit., pp. 208-209.

30% of all children entering first grade (when the goal of 100% matriculation is reached ) will be able to complete seven years of secondary school and graduate, either to enter the labor force directly or to continue with university studies.[19]

Colegio

Colegio, the most popular and most traditional of the secondary school cycles, is roughly equivalent to an academic high school in the United States. Designed along the French secondary school model, it prepares students for entrance into the historically popular university faculties of law, medicine, and the humanities. Recent legislation, however, has provided for increased amounts of science and mathematics, in the hope of better preparing students for university study in the technical fields which Brazil needs to further her development. The children of the upper class and the academically talented children of the middle class can realistically aspire to colegio and eventual university education.

The commercial courses (which have grown in importance over the last years) and the normal schools (which prepare elementary level teachers) are the second and third most popular branches of higher secondary education. These are basically attractive to middle class and lower middle class students who have little hope of being able to receive a university education. Some of the most practical courses, providing skills which are greatly needed in Brazil but which have appreciably less status, have agricultural, industrial, home economics, and nursing orientations. These courses have been developed over the past few decades to provide skilled personnel for professional fields which were not well served at other secondary levels or at the university level,and to educate people from the lower classes for fields which were not attractive to members of the middle or upper classes. (See Chart VI)

Chart VI: 1970 Secondary School Enrollment by Academic Branch (Approximately 4,000,000 students)

| | | | |
|---|---|---|---|
| academic | 74.77% | work oriented | .99% |
| commercial | 11.12 | agricultural | .49 |
| normal | 8.51 | home economics | .08 |
| industrial | 3.99 | nursing | .04 |
| | | arts | .01 |

Ministerio de Relaciones Exteriores, Brasil (Rio de Janeiro: Instituto Brasileiro da Geografía e Estatística, 1972), pp. 209-210.

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[19] Ibid., p. 207.

private schools

At the secondary level, 60% of schools are provided by the federal government. The 40% of secondary schools which are private play an important role in providing for the demand for academic education, although they are usually available only to those students whose parents can pay for private schools. Their academic content is the same as is found in government-financed shcools. Private schools traditionally have been of great importance at the secondary level. Sometimes there was no public school alternative, so the family that wanted a child to have more education had to send it to a private school. Often, private schools were felt to be "better" than most of the public schools--often they were better staffed and equipped. Many were church related, so the students' moral as well as academic education was tended to. Others had social status because they taught children from the "good" families, and students could develop ties of friendship which would serve them in future years. As the Ministry of Education has expanded and improved public secondary education, however, private school dominance has declined, and in many cases, parents no longer hesitate to send their children to public schools. In the cases of those families who were just beginning to improve their socio-economic status, there was probably never any hesitation, simply because they could not ignore any opportunity for further education.

university

entrance exam

The matriculation goal at the university level is to provide openings for at least half of the students who complete colegio. Because the demand for university studies is currently much greater than the available positions each year, entrance is based on an entrance examination known as the vestibular. The exam is administered nationally once a year. In 1976, in Rio 93,000 students were competing for 23,000 university openings; in Pernambuco, 33,000 tried for less than 8,000 openings.[20] Each student who takes the vestibular selects one department (faculty) within one university as his goal. When the examinations for each faculty are corrected and ranked, the administrators go down the list until the quota for that year is filled. The students have no option for second choice faculties. Those who do not gain entrance one year often continue to take the examinations in the following years, in an attempt to gain admission to some department, so that they can become university students. In the middle and upper class families, family pressure to study at the universities is very great. After finishing high school, many students study at special private schools which teach toward the vestibular for a year, to prepare for the test. If a university student wishes to change his specialization, he has to take and pass the vestibular for the new faculty and start his studies all over again, as a first year student.

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[20] "Vestibular: a Guerra dos 720 Mil," Manchete, January 24, 1976, pp. 20-23.

Until recently, Brazilian university education, modeled on the French university system, has required five years of study in one specialization. This was true of the private (usually Catholic or Protestant church sponsored) as well as the public universities. Recently changes in university education requirements were enacted. They allow some time devoted to general studies, followed by a specialization in one field with occasional electives outside that field, similar to higher education in the United States. Sixty universities now offer higher education in Brazil. Several were founded in the last few years. Existing technical and scientific departments have been expanded, with students specializing in a variety of fields. (See Chart VII). While many high level specialists are still educated in the United States or Europe, research and technical institutions are expanding, and dependence on foreign education is diminishing, although the dependence on foreign sources for textbooks in many technical fields is still very great. This presents students with additional problems, for, while many "classic" texts have been translated into Portuguese, the most up-to-date books are usually in some foreign language, which the students have to be able to read and understand. Universities, as well as other educational facilities, are concentrated in the South-East and South, with two-thirds of the nation's universities located in the states of Rio de Janeiro, São Paulo, Minas Gerais, and Rio Grande do Sul.

military education

Military schools have come to play a very important role in Brazil because of the military dominance of both government and the economy. The secondary schools prepare young men from many strata of society, some of whom continue in the armed forces, and some of whom take up civilian careers. The university-level academies of the army, navy, and air force not only prepare their students for traditional military careers, but also allow them to specialize in such diverse fields as medicine, economics, law, engineering, psychology, and statistics.

Military education, in general, has the aim of preparing men who will defend and advance the interests of the nation in its capitalist form of growth, so that Brazil will continue along the paths established by the current military regime. Military personnel fill roles as the heads of industries, in governmental ministries affecting areas such as social services, and in diplomatic positions abroad. Special advanced courses in the military academies help prepare them for these positions. Since the lower ranks of

Chart VII. Selected University Faculty Matriculations, 1970
(Total enrollment, 430,473)

| | |
|---|---|
| Liberal Arts | 128,402 |
| Law | 71,236 |
| Administration & Economics | 63,816 |
| Engineering | 41,896 |
| Medicine | 32,287 |
| Dentistry | 9,254 |
| Agriculture | 6,855 |
| Art | 6,338 |
| Social Work | 6,201 |
| Pharmacy | 4,700 |
| Nursing | 2,713 |
| Nutrition | 799 |
| Physical Therapy | 379 |
| Obstetrics | 63 |

Ministerio de Relaciones Exteriores, *Brasil* (Rio de Janeiro: Instituto Brasileiro da Geografía e Estatística, 1972), p. 233.

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the armed forces are filled by conscripts, often illiterate young men from rural areas, education forms part of basic training, providing knowledge that public schools would in other circumstances supply, as well as some basic skills which will improve the men's employment opportunities when they are discharged from service.

"brain drain"

One problem which besets many developing countries is the "brain drain." People who have been educated in public universities at great government expense often leave their homelands upon graduation and migrate to more developed nations in Europe or North America to practice their skills. However, in Brazil, the active growth of the economy, along with the size of the modern sector (numerically large, although only a small portion of the total population) and the relatively low numbers of university and technical school graduates all contribute to Brazil's ability to absorb these specialists into the economy. Graduates practice their occupations within the modern Brazilian sector, earning good wages. There is little need to look for employment outside the nation. When emigration does occur, it is sometimes caused by the desire to live in a freer political atmosphere.

drop-outs

In spite of the expansion of educational opportunities, rapid population growth places increasing demands on the schools. Education, in the broadest sense of the term, remains a privilege of the upper classes. Universal education, a goal only at the primary level, has not yet been accomplished. Large numbers of students who begin primary school drop out before the four years are completed. In the period from 1953 to 1967, of every 1000 students who passed first grade, 98 continued to enter ginasio (middle school), and of these, 50 entered colegio. By high school graduation, 968 of every 1000 had discontinued their studies. Eleven of these first grade "graduates" completed a college education.[21] In addition to the high drop-out rate, many students repeat grades several times.

Admittedly, the educational problem has come about because of insufficient attention by many administrations over the past decades; but today, still only a small portion of the population can aspire to secondary and university education for their children. The education which is received by the majority of students who attend for only one or two years, the maximum to which many people can aspire, may actually be wasted. To be functionally literate means having the opportunity to learn to read and write and to utilize those skills in daily activities, not letting them fall into disuse, only to be forgotten, as frequently happens. The problem of appropriate education for members of the traditional sectors has yet received little attention. Rural schools strive to offer the same basic education as is offered to children in modern, urban centers. The difference in the needs of the two social sectors, combined with the often-limited involvement of students in formal education, indicates that different approaches to education could well be more productive.

functional
literacy

In 1970, after three years of planning, the government launched an ambitious adult education program to offset the failure of education to reach a large portion of the population. Aimed at the 15 to 35 age group, MOBRAL (Brazilian Literacy Movement) is a basic five-month program. It is planned, evaluated, and partially funded by a central national agency, but its actual implementation is the responsibility of the local governments. The materials used are designed to be relevant to the life-styles of the students and to help them become integrated into the national life of a modern society. Books, magazines, and newspapers, designed for the newly literate, have been prepared also, to teach about "sanitary education, prevention of disease, job orientation, and civil awareness."[22] Additional follow-up courses to allow further studies are in the experimental stages. It should be noted that during the early 1960's, before the

adult
literacy
campaign

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[21] Richard Weisskoff and Francine B. Weisskoff, "The Political Economy of the Educational System," in H. Jon Rosenbaum and William Tyler, editors, Contemporary Brazil: Issues in Economic and Political Development (New York: Praeger Publishers, 1972) p. 381.

[22] Ministry of Education and Culture, MOBRAL: Brazilian Literacy Movement, unnumbered. (Available at the Consulate General of Brazil, New York, N.Y.)

present government came to power, an activist educator, Paulo Freire, designed a type of literacy and political awareness course, referred to as "conscientização," which was highly successful in areas of the North-East. He was deported soon after the military coup, because of his political leanings, but his literacy method of teaching on the basis of what the students experience in their daily activities has been used by the military regime, although the political content has been greatly altered.

By 1974, over eight million people had at least begun these literacy courses, although less than half actually completed them. Fatigue, lack of mental development caused by endemic malnutrition, and faulty vision, also produced in many cases by malnutrition, contribute to the inability of many people to complete the basic courses.[23] Providing educational opportunities for illiterate adults is a stop-gap educational strategy, by which some individuals can benefit and improve their opportunities in life. But it is not in itself a panacea for the educational ills of Brazil, and has no hope of being such before the uneducated portion of the adult population is physically healthy enough to take advantage of what is offered in the classroom. Even after a student successfully completes the course, the newly acquired skills will not be retained if there is no opportunity to use them.

dual economy

As long as the present dual economy exists in Brazil, the educational system, as it is now functioning, will serve the needs of the dominant modern sector. Professionals in many fields and bureaucrats are produced and absorbed into the economy. In addition, the educational system allows a limited number of people from the lower socio-economic levels to advance into fuller participation in the modern sector. It does not, however, raise the aspirations of large numbers of the lower classes who cannot, as yet, be absorbed by it. If Brazil is to experience true development and not just economic growth, if the members of the traditional sector are to better their socio-economic condition and the modern sector is to expand, the educational system will have to change. Education at all levels will have to be recognized as a need for all people and not just for the elite. Thus, educational opportunities must be expanded, more teachers prepared, and schools better staffed and equipped. Wasteful drop-out rates in both rural and urban schools must be greatly reduced. Rural schools must offer more appropriate courses of study to contribute to an improvement in life style in those regions.

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[23] "Brazil Gaining in Drive to Erradicate Illiteracy," New York Times, Aug. 20, 1975, p. 42.

The rural areas themselves must be developed enough to offer economic opportunities which will hold the educated youth in the region, to slow down the internal "brain drain."

## Income Distribution and Employment Opportunities

Income distribution within a nation refers to the percentage of annual national income which a particular portion of the population receives. Income distribution is influenced by many factors, some of which are natural resources, access to education and job opportunities, minimum wage laws, the extent of dualism in the economy, and the political power ratio of the sectors.

dual economy

In countries with a dual economy, it is very common for the richest five or ten percent of the population to have a very high share of the national income, while the poorest fifty or sixty percent of the population has a very small share. This reflects a situation in which there are, relatively, a few very rich people and many very poor people. With development planning there can be strategies for income redistribution, but under most circumstances, income distribution does not change very rapidly. The economic planners of some nations, including Brazil, believe that a long-term approach to redistribution of opportunities and benefits of development is the strategy to follow. Redistribution should occur as a by-product of overall increased output, without forcing a short-term and, potentially, economically disruptive redistribution. Thus, economic growth is pursued.

income redistribution

At the early stages of the development process, however, economic development can contribute to a relative decrease of the share of the poorest 20% of the population, transferring income toward the middle sectors. The share of wealth of the bottom 20% can be expected to increase only after relatively high levels of socio-economic development have been obtained. It is to the middle sector of the population that both social and economic development work to the greatest advantage. In highly developed nations, members of the middle sector receive the highest overall percentage of gross national income. In a study of income distribution in developing nations, based on data collected during the 1950's and 1960's, Brazil was found to have very uneven distribution. The lowest 60% of the population received an estimated 22.7% of the total national income, reflecting the fact that many people were outside the money economy.[24] With the rapid economic growth since 1964, there has been some negative redistribution of wealth within the nation. In 1960, the poorest 40% of the people received about 11.6% of the national income; in 1970, their share had fallen to 10%. During that same time period, the share of the richest 10% had grown from 39.7% to 47.8% of the national income. Real purchasing power increased for perhaps a third of the population during this period.[25] The traditional difference between the poor majority and the elite minority had not lessened.

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[24] Irma Adelman and Cynthia Taft Morris, "An Anatomy of Income Distribution Patterns in Developing Nations--A Summary of Findings" (unpublished paper, International Bank for Reconstruction and Development, 1971) pp. 5-15.

It is argued that economic growth has raised national income greatly over the past decade. The poor have a smaller share, but it is a share of much greater income; thus, in real rather than relative terms, they do receive more. This is hard to prove or disprove: the buying power of the share must be taken into account, but the lowered monetary buying power is offset by the value of social services which are, in some areas, growing.

gainful employment

basic needs

Employment opportunities can influence the redistribution of income. It is, therefore, necessary to look at employment in Brazil, not merely as a measure of economic growth, but as a measure of socio-economic well-being as well. There is a difference between employment and gainful employment. Many very poor people work long hours, only to eke out a bare subsistence existence. Gainful employment means having access to jobs in a healthful environment with remuneration that allows workers to meet some minimum standard of basic needs--an acceptable standard of living in regard to food, clothing, shelter, and household furnishings, as well as access to essential services such as potable water and sanitation, transportation, health, and education facilities.[26] The definition of basic needs may vary from one country to another, depending on climate, resources, and the overall level of development. In most nations, the definition of basic needs is implicit. But in the case of many developing nations, they should be made explicit, as goals of economic planning.

labor force

In all societies, the labor force is, or wants to be, engaged in activities which produce goods and services for themselves, and in many cases, for others as well. Members of a labor force can be employed in a full-time job that utilizes their skills and knowledge, unemployed (with no job), or underemployed with only a part-time or seasonal job and wanting more. The labor force can be divided into a traditional and a modern sector, cutting across the three types of economic activities. While members of the traditional sector are rarely engaged in gainful employment, as previously defined, members of the modern sector, especially the middle and upper classes, have met and exceed easily any measure of basic needs. A review of some portions of the three economic sectors will allow examination of the employment effects of growth since 1964. Primary activities include agriculture, fishing, collecting of natural products, and mining. Secondary activities include industry and manufacturing. Tertiary activities are "service" activities. Members of this sector range from waiters and maids, governmental bureaucrats, teachers, and medical personnel to retailers and office workers.

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[25] Brady Tyson, "Brazil: Nine Years of Military Tutelage," Worldview, July, 1973, p. 31.

[26] Report of the Director-General of the International Labor Office, Employment, Growth and Basic Needs: A One-World Problem (Geneva: International Labor Office, 1976), pp. 31-32.

primary sector

In the Brazilian primary sector, agriculture has both traditional and modern sectors. Labor legislation, which until recently had been designed in accordance with the necessities of industrial labor and commerce, has had very little effect on these workers. Only rarely do they receive the minimum wage or any of the social security benefits which apply to industrial labor. In most of Brazil, land has traditionally been held in large fazendas dedicated to the production of cash crops or cattle raising. More often than not , large areas are left idle, while lands under cultivation or being grazed are not used efficiently.

The need for extensive agrarian reform which would give landless farm laborers their own lands throughout Latin America was one of the basic tenets of the Alliance for Progress during the 1960's. The Brazilian military has not seen fit, however, to rearrange the existing patterns of land ownership, although some new lands have been made available in the North-East and Central-West. In practice, this means that while many people depend upon agriculture for their continued existence, few own the land upon which they work while many do not work the land they do own. In 1967, 60% of Brazilian farmers were totally landless.[27] As the population expands and the amount of available land increases less rapidly, the percentage of landless farmers continues to rise. Even with settlement projects in some parts of the interior, the potential for finding new arable lands is very limited. Pressure on the land is expected to continue until the secondary and tertiary economic sectors can absorb the excess labor force of the primary sector. Development of the primary sector, in fields such as forestry and fish hatcheries, could also lessen land pressures.

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[27] Farley, op. cit., p. 175.

land-access patterns

Lack of land ownership has resulted in the development of a number of formal and informal land-access patterns. In some cases, landowners simply allow squatters to occupy their lands for a few years and grow subsistence crops, before moving on to other, more fertile lands; this gives the owners access to cleared lands for cattle grazing. In other cases, sharecroppers give the landowners a certain percentage of their crops in return for permission to use the land. Yet other landowners will allow their laborers a plot of land to work and a hut to live in, in exchange for work on the owner's crops. In all of these cases, the farm laborer has the constant risk of losing access to land, home, and livelihood if he displeases the landowner. Many landless laborers are looking for land to work and would gladly take his place.

Farm laborers who cannot get access to land sufficient for their own needs must hire out seasonally to earn whatever cash they can. Some plantation crops, such as coffee and cacao, have to be tended and harvested manually, providing seasonal work for large numbers of people. It should be noted that plantation agriculture which produces cash crops does not always imply the use of modern agricultural methods. Expanded production had often been achieved by planting more acreage, rather than using more productive methods on existing acreage. In the mid 1960's, it was estimated that by improving planting materials, managing farms and soils better, and controlling diseases, the Brazilian output in areas then under cultivation could increase from 20% in the case of cane sugar, peanuts, and rice, to 100% in the case of cacao and coffee.[28] And since 1964, when agriculture began to command more attention, commercial production in general has doubled, due in large part to better farming methods.

In most cases, the landless agricultural laborers use very primitive farming methods which produce few surplus crops. Slash-and-burn agriculture, which was developed by the slash-and-burn agriculture

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[28] Ernest Feder, The Rape of the Peasantry: Latin America's Landholding System, Anchor Books (Garden City, New York: Doubleday & Company, Inc., 1971), p. 84.

Indians before the arrival of the Portuguese, is still used by many Brazilian farmers. It is very labor intensive and wasteful of soil and timber resources.[29] In addition, the farmer must relocate his fields every few years, in a never-ending search for fertile soil. It offers a subsistence living, and the absence of settled farming communities in much of the Brazilian interior makes it difficult for the government and other social agencies to provide education and health services for these people.

hoe culture

Hoe culture, the next advance in farming technology, "remains as the greatest labor-saving device known to the bulk of Brazil's rural labor force."[30] Much of the production of labor-intensive commercial crops such as cotton, tobacco, pineapples, grapes, and rice is based on hoe culture, as is coffee culture.

southern Brazil

Southern Brazil, with its heavy immigration of European peasants, is somewhat different. The non-Iberian European peasants came to Brazil with the intention of owning their own lands, and with the Central and Eastern European models of mixed farming and agriculture in mind. They settled mostly in temperate regions where the farming techniques (including the use of the plow) of their homelands could be directly applied, needing no modification for tropical climate as there was in most of the rest of Brazil. This is the only Brazilian region that has fixed agricultural communities.

sugar plantations

Since colonial times, the North-East has always been dominated by the plantation production of sugar, in which there were few landowners and many landless laborers (first slave, and then free). For several decades, however, the family-owned plantations and small subsistence farms on marginal lands of the region have been absorbed by corporate holdings. Sugar mills have amassed huge landholdings, only a portion of which are cultivated. Unlike the families, these corporations have no traditions regarding the laborers' "rights" to use land on these plantations, and the plight of the peasants in these areas has become even more precarious. In the early 1960's, the peasants in these areas organized in an attempt to demand land reform which would allow them ownership of many of the unused lands, but they were unsuccessful.

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[29] T: Lynn Smith, Brazil: People and Institutions, (3rd ed; Baton Rouge: Louisiana State University Press, 1963), pp. 365-368.

[30] *Ibid.*, pp. 372-373.

Much Brazilian agricultural activity is subsistence farming. Education, agricultural extension and credits, and new farming techniques, tools, seeds, and fertilizers must reach these people if their lives are to be improved. The farmers in many cases, could utilize surplus production within their own families. Other surplus production, which could easily be absorbed in urban areas, is useless as long as there is no transportation or marketing system which these small farmers can use.

The limited productivity of most small farms and many fazendas has negative repercussions in Brazil. Part of Brazil's limited national capital must be used to import foodstuffs, and large portions of the population are undernourished. The modern agricultural sector is only a small portion of all agriculture. However, modern farming techniques (not necessarily mechanized) used on both small plots and large acreages would increase production which could, to a great extent, be consumed within Brazil. Surplus foodstuffs could be offered on the international market. In the rush to produce for export, however, lands which previously were dedicated to lower-priced crops absorbed by the domestic market have been diverted, causing shortages of basic staples in the Brazilian diet. The dark beans which are eaten daily by tens of millions of Brazilians were recently in very short supply. Beef, too, is being exported in increasing amounts, while the people in large areas of Brazil have endemic protein malnutrition.

modern
agricultur
sector

A modern agricultural sector, concentrated in the southern part of the nation uses modern technology. It produces for export and commercial consumption, with the government supporting its expansion. The expanded soybean production over the past few years is a prime example of modern agriculture. (The 1976 production has been estimated at twelve million metric tons; in 1973-1974, it was under eight million.) As it is capital intensive, it uses machines and a limited number of skilled employees, rather than large numbers of people. A paradox of agricultural development, instead of increasing employment opportunities, commercial agriculture may actually replace large numbers of workers with machinery. The problem remains of finding modern commercially productive agriculture methods which can be labor intensive. Since the early 1960's, Brazil's agricultural production has doubled, but much of the production has been for export, and it has been the more affluent farmers who have benefited. Mechanized farming absorbs large amounts of capital which, under different circumstances, could be used to help the small farmers amd more labor intensive agricultural activities.

Because of land pressures, sometimes because of natural disasters such as droughts or floods, and because it is commonly known that industrial workers earn at least minumum wages and have a number of non-monetary benefits, rural laborers often migrate to regional urban centers or to the South-Eastern industrial triangle. In the cities, many of the unschooled and unskilled laborers enter the sector of the urban poor, subsisting, but contributing little to and benefiting little from the comforts of a modern urban life. The most successful migrants to the cities constitute a kind of "brain drain" of the more rural areas. They often are the more skilled and more educated of the rural population, people who potentially could have contributed to rural development. But they are attracted by the opportunities of urban areas, rather than by the static conditions found in the agricultural sectors.

secondary sector

The industrial workers of the secondary sector are part of the elite of the working classes, but their advantages should be examined. Since the 1930's, industrial workers have been the focus of legislation. Labor unions were formed; retirement funds, benefits, and minimum wages were established; social security plans (health services) were funded. But while the legislation seems to have been well planned, it is still very much limited in its outreach. As Chart IX indicates, the industrial sector employs only a small portion of the labor force.

Chart IX. Labor Activities of the Population over Ten Years of Age, 1970

| | Male | Female |
|---|---|---|
| agriculture, cattle, forestry, plant extraction, hunting, fishing | 36.1% | 3.8% |
| industry | 14.2 | 1.9 |
| commerce | 6.6 | 1.4 |
| services | 3.0 | 6.9 |
| transportation, communications, shopkeeping | 3.7 | .2 |
| social activities | 1.4 | 2.8 |
| public administration | 3.1 | .5 |
| other | 3.7 | .9 |
| inactive | 28.2 | 81.6 |

Ministerio de Relaciones Exteriores, Brasil (Rio de Janeiro: Instituto Brasileiro da Geografía e Estatística, 1972), pp. 182-183.

small factories

Industrial employment does not always mean large factories with hundreds of people working on the assembly line. In 1960, 83% of the Brazilian industrial concerns employed ten or fewer people, and these were often family members.[31] To a certain extent, small firms tend to be more labor intensive than larger competitors in the same field and also to require less capital per item produced.[32] Perhaps half of these small firms were involved in the processing or production of foods, beverages, textiles, and clothing.[33] In most cases, they produce for the domestic market, and their expansion is correlated with population growth and the level of wealth of the people.

capital intensive technology

On the other hand, there are numerous large factories which are modern and capital intensive, especially for the production of consumer durables and capital equipment. Very little labor intensive technology for the production of these products exists. Most research and development for technology occurs in the developed nations which, in general, have scarce labor, and relatively abundant capital supplies are available. The machinery and techniques of production which they design do not have expanded employment as a goal; in many cases, machines are designed to replace laborers. So the vast expansion of capital intensive industry over the past decades has not resulted in comparable vast expansion of direct job opportunities. It should be noted, however, that in many cases where capital intensive firms are established, they produce indirect employment opportunities if supportive economic activities are established.

labor unions

Labor unions fulfill more of a social role than an economic or political one. Since 1964, when the unions were purged of radicals, their activities have been sharply limited. Their membership is a small proportion of workers in any field. Unions are forbidden to strike, and they have no right to collective bargaining. Once yearly, union leaders are allowed to request salary adjustments. After discussions with business leaders, the Ministry of Labor decides upon wage increases, usually much lower than those requested by the unions, which must be accepted. To one extent or another, labor unions have educational facilities for their members and their families. Most unions have medical, dental, and legal services. Some have clubs or social centers.

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[31] Poppino, op. cit., p. 287.

[32] David Morawetz, "Employment Implications of Industrialization in Developing Countries: A Survey" (unpublished paper, International Bank for Reconstruction and Development, 1974), p. 47.

[33] Poppino, op. cit.

The Social Security of Industries (SESI), established by industry thirty years ago, is financed and maintained by assessments on industry. SESI provides social services to workers and their families, ranging from health clinics to educational facilities and mutual cooperation and assistance establishments. Their relatively large-scale operations supplement government attempts to provide expanded social services.[34]

minimum wage

The minimum wage which industrial workers are guaranteed is indeed minimal. It applies only to "adult workers" who work 200 hours or thirty days monthly. Minors or apprentices can expect to receive 50% of the minimum wage. In many cases, too, women can only expect half of the minimum wage, although, by law, they are entitled to the full wage. Many skilled workers as well as administrative and management personnel receive much more than the minimum wage. Every year on May 1, the President announces the percentage rise of the minimum salary, pegged closely to the official rate of inflation. The wage itself varies. It is higher in the South and South-East, and lower in the rest of the country (see Chart X). In most cases, the minimum wage is a subsistence wage which allows few if any luxuries, even modest ones. It is not uncommon for employers to lay off unskilled workers who are due to rise above the minimum wage, rather than pay them the increase. New unskilled workers are hired at the lower wage to replace them. For many workers, real wages have fallen since 1964. In 1965, a month's supply of food could be bought with 87 hours of work; in 1975, it took 151 hours of work to buy the same goods.[35] The fall in real wages is theoretically offset by the fact that now more women and children have access to jobs in the expanding economy, lessening reliance on men to provide all the needs of their families. However, the situation is not so easy to reconcile in most cases.

falling real wages

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[34] "Brazilian Industry Gives Social Assistance to Labourers and Their Families," Manchete (special English language edition entitled "Brazil's Future 1975-1979," 1975), pp. 120-121.

[35] Jonathan Kandell. "Brazil's Economic 'Miracle' Appears of Little Benefit to Workers," New York Times, January 25, 1976, p. 3.

Chart X. Minimum Salaries Announced May, 1975 (in crizeiros) and the Expected Use of the Monies

| | | |
|---|---|---|
| São Paulo: | $C. 532.80/month<br>($C. 2.22/hour) | 43%- food<br>33%- housing<br>14%- clothing<br>6%- hygiene<br>4%- transportation |
| Sergipe: | $C. 376.80/month<br>($C. 1.57/hour) | 53%- food<br>34%- housing<br>8%- clothing<br>4%- hygiene<br>1%- transportation |

Fundação Instituto Brasileiro da Geografía e Estatística, *Sinopse Estatístico do Brasil, 1975* (Rio de Janeiro, 1975), IV, p. 345.

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tertiary sector

"Services," the tertiary economic sector, includes a wide range of activities whose common denominator is that they are neither agricultural/extractive nor industrial. Some of these activities are covered by labor legislation and some are not. The educated and skilled members of the tertiary sector, doctors, lawyers, office workers, teachers, social workers, merchants, sales people, and others, do receive at least the minimum wage and non-monetary benefits which industrial workers receive. In Brazil, where the government is taking over increasing responsibilities in the social and economic spheres, the governmental bureaucracies at the federal, state, and local levels form one employment field which is expanding at a fast pace, absorbing increasing portions of the educated work force.

But the tertiary sector also employs many of the nation's underemployed. Unskilled workers who cannot get jobs in either the primary or secondary sectors look to this sector to provide some kind of work, often hoping that it will be temporary, until a position with guarantees and benefits can be found. The more urban a region is, the more positions it is apt to offer in the tertiary sector. Women and girls who live in or migrate to the cities often look for positions as domestics--as maids, cooks, governesses, or laundry women. In spite of the rising level of Brazilian economic development, washing machines, vacuum cleaners, dishwashers, electric steam irons and floor polishers, and other labor-saving devices are uncommon. Instead, in middle and upper class homes, it is common practice to have one or more domestics, often as full-time, live-in help. Usually receiving

domestic

a low salary and only one free day weekly, women who hold full-time domestic positions have their room and board assured and may, over time, gain relatively secure and comfortable positions. In addition, those who come to the cities from the countryside and are lucky enough to get a full-time live-in position are somewhat protected from the fast pace and many confusing decisions necessitated by independent living in the "big cities," so different from rural life, until they are more accustomed to city life. Those who do not find full-time, live-in positions or who want only part-time positions because of family responsibilities, receive low salaries and no benefits.

under-employment

Men and boys without skills may look for jobs as delivery boys, janitors, or as food and drink vendors in the streets. Types of self-employment vary, ranging from shining shoes, to selling lottery tickets, newspapers, or flowers. Entire families involve themselves in collecting discarded paper, bottles, metals, rags, or other materials which can be sold, by weight, to junk dealers. Some people raise chickens for sale. Those living by the sea may collect crabs in the tidal flats to sell to the retailers of the markets. Others go door-to-door in residential areas, selling homemade goods or sweets. While people involved in these marginal activities may work long, hard days, their labor rarely yields more money than that required on a day-to-day basis. In many cases, for a family to subsist, from an early age all family members must "hustle" in order to assure the family's survival.

Small-time entrepreneurs in the favelas open businesses in their own homes, selling coffee, sugar, rice, and beans to people who can buy for only one day at a time. Women may take in laundry or do hand sewing. Men may repair shoes or radios. Some have managed to buy a television set and allow people to watch it, for a small price.

That large numbers of people in the tertiary sector depend upon improvised jobs reflects the inability of the economy to provide jobs with minimum wages and benefits. In the vast majority of cases, these marginal positions provide no security, allow no savings or accumulation of wealth, and rarely permit those involved any hope for substantial improvements in their personal lives.

middle class

In this study, reference is made to the Brazilian middle class as if it were an appendage of the elite, rather than as a distinct social group with its own values and mores. Unlike the middle class of the United States which is composed of a large diverse group with its own "personality," the Brazilian middle class, a proportionally small segment of the total population, is aspiring to the life-style and sharing the values of the rich. Membership in the middle and upper class is dependent on education, income, and often family ties. The Brazilian equivalents of the factory workers, skilled laborers, small farmers, construction workers, etc. who belong to the American middle class would, in the vast majority of cases, be in the upper ranks of the Brazilian lower class.

The middle and upper class Brazilian grouping is composed elite of people who have often completed high school and even university studies. They are large landowners, industrialists, engineers, architects, technocrats, management personnel, merchants, military officers, politicians at the state and federal levels, high ranking government bureaucrats, lawyers, dentists, doctors, university professors, church hierarchy, personalities in the arts and sports, those people whose stores, restaurants, discotheques, and offices serve other members of the elite, and foreigners who work in similar positions within Brazil. These are the people who are the beneficiaries of good health care and nutrition, good education, and the favorable income distribution. They have telephones, color televisions, stereo sets, and refrigerators in their homes. They drive one or more cars, wear fashionable clothing, drink imported whisky, take vacations, and have cameras to record those vacations. These people are the minority whose income and life-style have remained stable or improved since 1964.

Economic development over the past decade has allowed only relatively few people to experience significant improvements in their lives, and has not noticeably changed the condition of the poorest people. In those economic sectors which offer minimum wages and benefits, the number of people affected has risen, but the proportion of the entire labor force affected has changed very little. In any case, the minimum wage alone does not provide for basic needs, much less offset falling real wages. As the population grows, increasing numbers of Brazilians join the large portion of the labor force that does not have gainful employment and that does not enjoy the benefits of economic development. Development strategies need to be designed to allow improvements in employment prospects and life-style for proportionately more workers in the lower levels of all three economic sectors. Existing labor legislation needs to be expanded in scope and enforcement. So far, the redistribution of the benefits of the current phase of economic development has helped only those who were already relatively well off.

## Student Activities

Define the following terms in terms of Brazil's development:

- -agrarian reform
- -basic needs
- -brain drain
- -conscientização
- -favela
- -gainful employment
- -income redistribution
- -internal migration
- -malnutrition
- -real wages
- -rising expectations
- -underemployment
- -upward mobility
- -urbanization

Discuss the following questions, if necessary doing additional research. If appropriate, discuss them in reference to Brazil, the United States, and other countries you may be familiar with.

- -Why is demographic information about a region important?
- -In the United States, what social responsibilities has government assumed? Which responsibilities have not been assumed by federal, state, or local government?
- -Why do governments limit their social expenditures?
- -How is a dual economy reflected in the lives of people in the two sectors?
- -Can a nation be considered developed as long as the traditional sector of a dual economy continues to exist?
- -Why do people leave their homes in the interior to live in favelas in the cities?
- -Why don't very many people migrate to the newly opened regions of the interior form the overcrowded cities?
- -What is the importance of building new highways through the interior of a country?
- -Why is it often difficult for planners or "experts" to design and teach ways of improving life-style to members of the traditional sector?
- -How do land tenure patterns affect rural development?
- -How does the poor health of a population have negative repercussions in the economy?
- -How does malnutrition affect children's ability to learn in school and adults' ability to work?
- -How are problems of food supply affected by the locale in which people live?
- -How can food preferences be cultural? Are there cultural limitations on what people in the United States eat?
- -Why would a country with a large portion of the population suffering from malnutrition export agricultural commodities?
- -What can be the role of paraprofessional health workers in a developing country?
- -If potable water systems and sewage systems contribute to a healthier population, why don't all towns and cities have them?

- Why is non-formal, as well as formal, health education important?
- Compare and contrast major causes of death in developed and developing regions.
- Where are educational and medical facilities concentrated? Why?
- What is functional literacy?
- What is the role of adult education in a developing nation?
- Research and discuss Paulo Freire's method of adult education, conscientização.
- How can education be seen as a privilege of the elite?
- What are the advantages and disadvantages of college entrance examinations like the vestibular compared with the United States' Scholastic Aptitude Test?
- What would be the advantages and disadvantages of developing special educational objectives and goals for students in rural areas?
- Explain Brazil's internal "brain drain."
- Why is the kind of education offered in the Brazilian military schools important to that nation's social and economic future?
- Define the primary, secondary, and tertiary sectors of the economy. Compare and contrast them in the modern and traditional sectors of the dual economy.
- Why would redistribution of wealth be a difficult goal to accomplish?
- Define "elite" in terms of society in Brazil and in the United States.
- How can a teacher, a secretary, and a governmental bureaucrat be considered part of a nation's elite?

## Additional Readings

Report of the Director-General of the International Labor Office. *Employment, Growth, and Basic Needs: A One-World Problem*. Geneva: International Labor Office. The focus of the book is improved social well-being and economic growth for the people of the nations of the world. It is sensitive to the international factors which affect the individual nation's development.

Rich, William. *Smaller Families Through Socail and Economic Progress*. Washington, D.C.: Overseas Development Council. This is an interesting discussion of how development of an area correlates and may contribute to a lowered birth rate.

Spivey, J. Carlisle. *World Food Supply: A Global Development Studies Case Study*. Madison, N.J.: Global Development

Studies Institute.
The purpose of the study is to offer a more thorough understanding of the problem of inequitable production and distribution of the world's food supply within the context of global interdependence.

World Bank. *Health: Sector Policy Paper*. Washington, D.C.: The World Bank.
This gives a very good introductory discussion of health and health policies in developing nations. There are interesting statistical annexes.

World Bank. *Housing: Sector Policy Paper*. Washington, D.C.: The World Bank.
An important aspect of social well-being which was not discussed in this case study is decent housing. This policy paper gives a good introduction to this topic.

# Conclusions

In 1964, the military assumed control of Brazil, at a time when the country was experiencing a period of severe social, political, and economic crises. For the next thirteen years, the military regime followed a rather consistent stabilization and development program, allowing rapid economic growth and diversification, modifying the character and role of government, and advocating social calm.

The inherent problems which all Brazilian governments, past and present, have had to cope with are the cumulative result of Brazil's history and its relationship with the rest of the world. The economic problems include:

- basic dependence on a few major commodities whose value on the international markets can fluctuate widely
- spatial concentration of economic infrastructure and industrial production
- limited entrepreneurial behavior
- limited domestic market
- dual economic levels with modern economic activities in close proximity to archaic subsistence activities
- an archaic land tenure system
- industrial development which in many cases is dependent on foreign, capital intensive technology, export to foreign markets, and large amounts of imported petroleum
- a growing need for skilled workers and middle and upper level managers, while unskilled laborers form the majority of the labor force

The social problems emanate from a fairly rigid, two-tiered social structure. It consists of a rich minority and a poor majority for which upward mobility is limited. The increase in the upper group has been more a result of immigration than by gradual upward mobility of the traditionally lower classes. This system is supported by unequal access to education, health care, and adequate nutrition, which, in turn, affects the physical and intellectual development of the individual and his ability to take advantage of opportunities which might arise. As internal communications and transportation systems have improved, increasing numbers of the growing rural population have migrated to the larger cities and to important industrial centers in an attempt to improve their access to economic opportunities. This has placed increased demand on available and already over-extended urban social services. These problems are aggravated by rapid population growth, which is higher in the poorer and more rural sectors of the population.

In government, the problems have centered on defining the form and structures most appropriate for the nation and the civic role of the citizenry. In Brazil's post-colonial experience, the variety of governmental forms attempted reflects the search for the political system most suited to Brazil. Since 1964, government has become increasingly centralized in the executive branch of federal government. Closely regulated and monitored democratic processes both require people to vote and allow the Congress to remain in session. But in all cases, policies are subject to the will of the executive branch of national government which, in turn, is formed by and subject to the will of the military leadership which vacillates between a hard and a soft line. Such an arrangement has led to the president's having dictatorial powers when he deems them necessary. Although the procedures of democratic processes are being followed, there is no indication that the Brazilian electorate is undergoing a maturation of political understanding or of its decision-making powers. Also, there is no evidence that, if Brazilian politics were once again open to representatives of all political persuasions, Brazilian voters would make choices different from those of the 1950's or early 1960's which led to the military takeover. The fact that much of the opposition is currently silenced through censorship, deprivation of political rights, exile, and imprisonment also suggests that if open elections were again held, pent-up frustrations and repressed accusations against the military's form of government since 1964 could be transformed into political demagoguery. At this time, however, there is no indication that the military leadership is considering a return to civilian rule, and there is no non-military faction or group with the power to effect such a change.

In a speech delivered in 1970, President Médici said, "Brazil is doing well, but the people fare badly." Thus it still remains--the economy has expanded at a rapid pace while social services and expenditures and related social welfare improve slowly. In this sense, it must be asked if Brazil is nearer qualification as a nation with balanced development than it was in 1964, when the military regime assumed control. The weakness thus far of the development strategies lies in the underlying supposition that "the pie must be much bigger before everyone can have a slice." While the "pie"--economic production and profit--is indeed much bigger, the result to date is that the people who previously had "large slices of a small pie" now have "larger slices of a larger pie." Few additional people have been invited to the table.

Social development under the military regime has been disappointing to those who measure development in terms of social improvement. A vast amount of work remains to be done. Investments in the social sector are much lower than those made in the economic sector, and the goals established are much less ambitious. While health care, education, and employment opportunities have expanded numerically, they have expanded because of requirements for economic growth and have still barely outpaced population growth. Since 1964, the population has grown from under 80 million to over 110 million, adding more people to the ranks of the poor than to the ranks of the rich.

In spite of the creation of improved social services and expanded economic opportunities in some parts of the interior, the inducements to stay in rural areas, rather than to migrate to industrial centers, do not outweigh the real or imagined benefits of the city to the young and ambitious. Urban migration puts increasing pressures on cities which cannot provide for their actual inhabitants, let alone for additional people. São Paulo, for example, grows by about half a million immigrants yearly. A recent report found that "urban poverty and its attendant social ills have for the first time matched those of most wretched rural areas."[1]

The relatively slow rate of social investments and social improvements in comparison to the need is not based on lack of awareness of the problems or on the fact that the military leadership is composed of people who do not care about the situation and therefore do not want to make adequate investments. Underlying the confidence in Brazil's economic future and potential status as a world power is the fear that somehow, just as in the past, the "boom" situation and apparent economic strength and apparent assured future growth (the self-sustaining economy) will again bottom out into yet another "bust" followed by a long depression. Fear that premature investments in social programs would divert capital from possibly necessary economic investments, and obligate indefinite future financing which the economy might not be able to generate, has thus far prevailed over the desire to provide social services for all the Brazilian population. In the planning theory upon which the Brazilian development strategies are based is the belief that the benefits of economic growth will eventually and naturally "trickle down" to the lower levels of society, without any socially or economically disruptive, forced redistribution. The basic fallacy of this assumption is the belief that this effect can occur rapidly, within one generation, and positively affect 50 million or more people. Improvements in the lives of all these people as a result of the natural "trickle down" would be minimal--not anything near the vast amount of improvements which are necessary. Social improvement has been seen as an aftereffect of economic growth, rather than as an equal and interrelated factor of development.

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[1] "Latins Apply 'Shock' to Treat the Economy," New York Times, January 25, 1976, p. 49.

The extensive improvements in well-being needed by at least half of the Brazilian population necessitate at least a generation of active government involvement, with well thought out planning and extensive investments. These social improvements are as important to the overall future well-being of the nation as is the creation of an adequate economic infrastructure or a diversified economy. If the decision to confront these problems on an all-pervasive and long-term basis is not made soon while the possibility to resolve them without turmoil still exists, the growing numerical size of Brazil's poor majority may turn that nation into another India, China, or Indonesia, in terms of the population/redistribution problems. This does not mean that the development strategies must be reversed 100%, with all attention given to social improvements while the economy fends for itself. But it does mean that social investments should be of higher priority than they are.

Aiming at a steady but lower rate of economic expansion, while the economy continues to mature from all the growth of the past dozen years, could allow more investments in the social sector. The latest economic development plan has very ambitious social goals compared with those of the past, but preliminary results will not be available until 1979, and the public spending cuts announced in late 1976 by the government may well eat into the budget for social development before touching the budget for economic investments. In any event, social development in Brazil will need more than five years of concerted action before positive results can be felt nation-wide.

Since 1964, "development" when used in reference to Brazil has meant economic growth. Economic growth and diversification have occurred at a rate seldom seen for short periods of time, let alone over a span of years. In internal policies, the attitude has been "what's good for economic growth is good for Brazil." Modern planning methods and forecasting have been utilized to direct investments into a variety of related economic activities, with the intention of producing a strong, diversified economy. The problems of the less developed regions within Brazil have received attention, and some foundations for future regional growth have been laid, but the dominance of the industrial triangle has not diminished.

Strategic decisions have been supported wholeheartedly by all levels of government, to the point where public policy debate does not exist. While this has resulted in a rather repressive atmosphere for some sectors of the public, it has also contributed to the creation of the appearance of stability and of a favorable investment climate. A large portion of the investments made in Brazil since 1964 have come directly or indirectly from foreign sources--from lending insitutions which deal directly with the government and from MNCs making direct investments. This has greatly facilitated achievement of established economic goals. Policies regarding the expansion of industry are favorable to the investors. Corporate profits have been allowed to grow while wages remain low. Labor problems do not exist because unions are not allowed to strike. Ecological concerns and pollution controls which usually contribute to higher production costs, making manufactures less competitive, have received little attention, resulting in high levels of water and air pollution in industrial centers. Large acreages in the Amazon basin have been razed, either to put through new roads, or to allow lumbering, or to clear space for commercial farming or cattle raising. Production of high quality, low cost consumer goods for domestic consumption is not required. Large industries aim at external markets, where demand is higher and where sales will result in an improved balance of trade for Brazil. Exports of agricultural commodities and processed meats have also grown rapidly.

International policies, too, have evolved to a more independent posture with Brazil defending its particular interests rather than those of the Western, industrialized world with which it identifies. Although seeing itself as a candidate for big power status, Brazil will side with the Third World in matters directly related to its own development. In 1970, Brazil announced the unilateral adoption of 200-mile coastal rights. It has refused to sign nuclear non-proliferation treaties which would limit access to nuclear technology. At the Stockholm environmental conference in 1972, it refused to sign pollution control agreements, and it is a supporter of producer nation commodities cartels and price supports. Since 1973, Brazil has also taken international actions which have sided with the oil producing nations of the world, perhaps in an indirect attempt to secure its future petroleum supply. Following this principle, Brazil voted in the U.N. General Assembly to condemn Israeli aggression in the Middle East; it also gave immediate recognition to the MPLA government in Angola, where it is now working toward the development of petroleum reserves.

National and international decisions since 1964 have supported Brazil's drive for economic growth. Public investments in infrastructure--roads, communications, ports, power--and in basic industries are undeniably important in terms of future national development. These investments will be yielding increasing returns to the nation, and government decision-makers will have the opportunity to consider new options on future investments. They may decide upon continued direct economic investments. Or, they may begin to redirect a larger portion of the monies into social investments which will benefit an increasing proportion of the population. In spite of these concentrated attempts to create a diversified economy with self-sustaining growth, future economic development will depend on the social development of the population and, also, on global factors which affect all nations.

Dependence on foreign sources for some 80% of the petroleum consumed has slowed down the rate of economic expansion since 1973, and oil will continue to have an important economic role for some time to come. The Brazilian government is supporting research into substitutes for petroleum, intensifying exploration for oil deposits within Brazil, and working in joint ventures in less developed nations with petroleum reserves. But, until substitutes or new oil fields are found, the rate of growth of industry, agriculture, and the transportation infrastructure will all depend on the cost and availability of foreign oil.

Because of the regular balance of trade deficits and the growing international debt, Brazil continues to depend on a steady inflow of foreign loans and investments to stabilize the economy and to ensure some economic growth over the next years. This may, quite possibly, be at the continued expense of private Brazilian concerns. It is probable that the many economic activities which have been modernized and established over the last decade will contribute to an increasingly stable economy, less dependent on foreign capital, as long as markets are available for Brazilian production. But because of its relatively small domestic market, Brazil will continue to be dependent on foreign markets to absorb large portions of agricultural and mineral commodities, as well as manufactures.

Exports have both diversified and expanded under military leadership to include a small but growing trade in consumer goods, consumer durables, and some capital goods. Although the United States remains a major consumer of Brazilian exports, trade with eastern and western Europe, as well as Africa, Latin America, and Japan has expanded. The growth of the foreign markets for specific exports is dependent upon what the buyer nations, themselves, produce, and which they at times protect with high tariffs. While most developed nations want to import commodities, they are less willing to import finished products which they can produce competively themselves. The fluctuation in the price of commodities which are absorbed on the international markets is unpredictable and can vary greatly from one year to the next. The developing nations in Africa and Latin America are more dependent on imported manufactures than are developed countries, making them likely trading partners for Brazil in its manufactures exports, in exchange for raw materials needed by Brazilian industry. The attempt to expand exports to oil producing nations will continue, because the Arab nations which furnish the bulk of Brazil's oil import very little from Brazil, and their resultant balance of trade is very unequal.

Brazil is now an active particiapnt in the global economy. If it is to join the ranks of the developed nations, as most Brazilians believe it will soon do, the nation must yet undergo an extensive program of social development. Under military leadership, Brazil experienced the economic "miracle" and then continued economic expansion. The nation has yet to experience the sorely needed "social miracle," which cannot be postponed indefinitely if development, in the broadest sense of the term, is to occur.

## Student Activities

Discuss the following, making reference where necessary to the experiences of other nations as well.

- How can the Brazilian government foster development in the interior? Remember that the provision of roads, social services, and industrial establishments is very expensive.
- What are the advantages and disadvantages of providing good schools, good health facilities, and good job opportunities in the cities? In the rural areas?

- If Brazil's foreign markets stop buying Brazilian industrial products, Brazilian industries will have to stop production, or the internal market will have to be expanded. Why? How could each of these be done, and what would be the long-range effects? Do other options exist? If so, what are they?
- At some future date, the military may return political control to civilians. How could this be done without creating political chaos?
- At some future date, social development will have to be made a top priority. Is this true? If so, design a plan, either local, regional, or national, mentioning the possible sources of revenues and the specific goals, to deal with an issue or series of interrelated issues of your choice.
- Discuss the concept of the North-East as a colony of southern Brazil. Keep in mind typical colonial relationships.
- Compare the development problems of the North-East with those of the African Sahel.
- Study Brazil's participation in organizations such as LAFTA, the U.N., and the OAS. How are these organizations affected by international events? How is Brazil's participation in them affected by international events?
- Research current foreign investments by banks, development agencies, and multinationals from the United States, Japan, and Germany. What areas are these investments made in? Are they increasing or decreasing?
- Research Brazilian economic ventures to the newly independent African countries which had been Portuguese colonies. How do such relationships help Brazil? Compare the policies of the Brazilians with the role of the United States or other first world nations in the developing regions of the world.
- Compare Brazil's current developmental issues with the same issues as they occur in the context of the United States. Do both countries share any problems? If so, do their attempts to resolve the problems share any similarities?

Research and discuss the following issues of current interest.

- Get information on 1976 and 1977 Brazilian exports and balance of trade. Are industrial exports continuing their growth? How have higher coffee prices affected export earnings and trade balance? How may the current state of the Brazilian economy affect development within the next few years?

- What is Brazil's position concerning world coffee prices? Why has this stance been taken?

- Research the Brazil-West Germany nuclear power treaty. Why is the United States, as well as other nations, worried about the implications of Brazil producing its own atomic power?
- Study political events in Brazil in 1977, including the suspension of Congress for two weeks in the spring, demonstrations in some cities calling for a return to civilian government, and the selection of candidates for the 1978 presidential elections. What does this suggest about future political directions?
- What has happened to Brazilian relations with the United States since the issue of human rights was raised by the Carter administration?

The following is a topic for class debate after doing additional research on development in Brazil.

- The author's thesis is that while economic growth has occurred in Brazil since 1964, social development has not. Argue against this thesis taking the point of view of the Brazilian federal government. After looking at both sides, decide for yourself if development, as defined in this case study, has or has not occurred.

# Glossary

all-weather roads- roads which are passable year round, not subject to seasonal disruptions such as flooding; not necessarily paved.

ARENA- Aliança Renovadora Nacional. National Renovation Alliance. the pro-government political party.

basic needs- a standard of living in regard to food, clothing, shelter, household furnishings, and access to essential services.

campo cerrado- land covered with a mixture of grass, brush, and scrub.

conscientização- a type of education in which the student is taught through the development of awareness of the political, economic, and social milieu in which he lives, developed by Paulo Freire.

EEC- European Economic Community. the Common Market.

Extranational- coming from sources of any kind outside the nation.

favela- slum; shantytown.

fazenda- large farm or cattle ranch.

industrial triangle- the highly industrialized region centered around the cities of São Paulo, Rio de Janeiro, and Belo Horizonte.

infrastructure- transportation, communication, and power systems which serve an area.

LAFTA- Latin America Free Trade Association.

level of living- the amount of goods and services to which people are ordinarily accustomed.

long-term return- a return which will be yielded after a generation or more has passed.

MDB- Movimento Democrâtico Brasileiro. Brazilian Democratic Movement. the opposition party.

MNC- multinational corporation.

MOBRAL- Movimento Brasileiro de Alfabetização. Brazilian Literacy Movement. an adult education campaign.

moderating power- the power to settle disagreements over national political decisions; at first belonged to the Emperor, later taken on by the military.

nationalization- the take-over by government of an industry or economic activity, with compensation to the original owner decided upon by the new owners.

OPEC- Organization of Petroleum Exporting countries. a highly successful commodities cartel.

PAHO- Pan American Health Organization.

PRODOESTE- Programa de Desenvolvimênto do Oeste. Central-West Development Program. regional development agency.

regionalism- identification with a specific region of a nation, rather than identification with the whole nation.

revolution- when used in reference to the 1964 military takeover, this refers simply to the change in form of government.

SALTE- Saúde, Alimentação, Transporte e Energia. Health, Food, Transportation, and Power; acronym means "leap." the first national Brazilian development program, 1949-1953.

short-term return- monetary returns which will begin to go back to the investor after a few years, definitely within a decade.

slash-and-burn- a primitive method of agriculture in which land is cleared by cutting down the vegetation and burning it, in preparation for sowing; mineral resources of the soil are depleted in a few years and the land is abandoned, to be overgrown again by the natural vegetation.

spatial adjustment- change in the location or distribution of population and of economic infrastructure and activities.

standard of living- the amount of goods and services to which people ordinarily aspire.

state capitalism- an economic system in which many economic activities are owned by government.

SUDAM- Superintendência de Desenvolvimento da Amazônia. Amazonia Development Board, the regional development agency for the Amazon basin.

SUDENE- Superintêndencia do Desenvolvimento do Nordeste. North-East Development Board, the regional development agency for the North-East.

SUVALE- Superintendência do Vale de São Francisco. São Francisco Valley Development Board, the regional development agency for the São Francisco river region.

syncretism- a cultural mixture in which meanings of one culture are represented through symbols of another culture, i.e. Roman Catholic saints with the attributes and powers of African dieties.

technocrat- highly trained scientific and economic planners and managers.

U.S.AID- United States Agency for International Development.

valorization- an economic measure in which government buys a commodity from the nation's producers at an established price which may be above the world price, and then sells it on the world market.

WHO- World Health Organization

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